

مكتبة الصلح

FINANCIAL TIMES

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JAPAN Asia test for new foreign policy Page 22

Table with exchange rates for various countries including Australia, Canada, Denmark, etc.

World News

Navy man killed by N Ireland car bomb

A man believed to be a Royal Navy recruitment officer was killed in an IRA car bomb attack in Northern Ireland...

New Pretoria ban The South African authorities banned the End Conscription Campaign, a white dissident group...

Zia guards held Fifty-five members of an army unit which guarded Gen Zia's aircraft were held before its ill-fated flight...

Burma erupts again Lawyers and doctors joined renewed protests in Rangoon, Mandalay and other Burmese cities...

Burundi toll mounts Army helicopters and armoured cars reportedly hunted down peasants fleeing from continuing tribal massacres...

Korea talks stalled Talks between North and South Korean parliamentarians on the North's threatened boycott of next month's Olympic games...

Cyprus to meet Turkish-Cypriot leader Rauf Denktaş and Greek-Cypriot President George Vassiliou arrived in Geneva for two days of UN-sponsored peace talks...

Serbia plan protests Serbs and Montenegrins in Yugoslavia's ethnically torn Kosovo province announced plans to protest against alleged persecution by Albanian nationalists...

Australian reshuffle Australian Prime Minister Bob Hawke reshuffled his Cabinet following last week's resignation by Foreign Minister Bill Hayden...

West Bank curfew Israeli troops shot and wounded nine Palestinians and placed Nablus, the largest Arab city in the West Bank, under curfew during a general strike in the occupied territories...

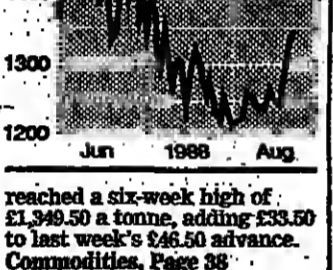
Business Summary

Bond Corp profits more than treble to A\$402.6m

BOND CORPORATION, Perth-based company of Mr Alan Bond's multinational business empire, surprised analysts by reporting after-tax profits of A\$402.6m (US\$327m), more than treble the A\$126.2m recorded in the 12 months to June 1987...

WICKES Companies, leading US automotive products, wall coverings and fabrics manufacturer, has agreed to be taken private in a leveraged buyout led by its chairman, for \$12 a share or \$478.2m. Page 23

COPPER PRICES on the London Metal Exchange were buoyed by sterling's weakness. The cash grade A position



reached a six-week high of \$1,949.50 a tonne, adding \$35.50 to last week's \$1,914.00 advance. Commodities, Page 28

BAT INDUSTRIES, tobacco-based multinational, extended until Wednesday night the deadline for its \$72 per share increased offer for Farmers Group, US insurer. Page 23

IMPERIAL Chemical Industries, Britain's biggest chemicals company, plans to spend \$300m (\$500m) a year in the 1990s on investments related to bulk materials production, a 50 per cent increase on the current figure. Page 6

JERISH DISTILLERS, Irish whisky producer, rejected a takeover offer of \$258m (\$358.7m) from Grand Metropolitan, UK drinks group. Page 27

SAGA PETROLEUM, Norwegian oil independent, suffered a steep fall in first-half pre-tax profits to Nkr62m (\$8m) from Nkr25m last year, due to lower oil prices and a reduction in net financial income. Page 25

BANCA COMMERCIALE ITALIANA (BCI), Italian bank, and Iri, its parent company, were urgently studying the implications of unexpected intervention by the US Federal Reserve Board in BCI's attempt to acquire control of Irving Trust of New York. Page 23

UNITED PAPER MILLS, Finnish forest products group, reported that group turnover for the first half rose 14 per cent to Fm2.89bn (\$600m) while profit before taxes climbed 52 per cent to Fm367m. Page 25

HONGKONG Aircraft Engineering Company (Haseco), aircraft maintenance subsidiary of Swiss Pacific, reported a 37 per cent rise in profits to HK\$116.3m (US\$15m) for the first-half. Page 26

MIM HOLDINGS, Brisbane-based resources group, said that net profits more than quadrupled to A\$172.9m (US\$140m) from A\$39.6m last year. Page 26

Warsaw moves to quell strikes

By Our Foreign Staff

THE POLISH authorities last night moved to quell the growing waves of strikes throughout the country and announced that they had empowered local authorities to impose curfews in three regions hit by strikes. The announcement was made on state television by General Czeslaw Kiszczak, the Interior Minister...

outlawed independent trade union Solidarity. The unrest, in which tens of thousands of workers have been idled, yesterday, spread to Warsaw. Earlier, Mr Lech Walesa, leader of Solidarity, joined several hundred workers in the Lenin shipyard who went on strike in sympathy with more than 10,000 striking coal miners in southern Poland. Riot police quickly sealed off the shipyard...

Gen Jaruzelski was a strike begun yesterday by nearly 2,000 workers in the Stalowa Wola steel mill south of Warsaw which employs 18,000. The strikes, fuelled by demands for wage rises as well as the legalisation of Solidarity, are widely believed in Poland to be more volatile and dangerous for the Government than those earlier this year. As riot police sealed off the Gdansk shipyard, striking workers marched through the yard with Solidarity banners as chanted...



Solidarity leader Lech Walesa addressing a rally

North Sea oil groups will be required to raise safety standards

By Steven Butler in London

OIL COMPANIES operating in the North Sea could face hundreds of millions of pounds in extra costs as a result of British Government moves this week to tighten safety standards.

present on the platform at the time of the initial explosion was insufficient to explain the severity of the disaster. Occidental Petroleum, which operates the Piper field, said yesterday it could not confirm whether a safety valve had been closed out by the initial explosion on the platform, or had otherwise failed, and that this was under investigation by a technical team from the Department of Energy...

production. Valves currently in use also require frequent maintenance, which would be impractical on the seabed. Some companies argue that careful placement of valves on board platforms provides adequate safety.

The action is a result of the explosion last week which destroyed the Piper Alpha oil platform, killing 167 people. Ministers are putting final touches on a directive that will require oil companies to submit plans to modify their offshore installations. This could force the industry to fit existing platforms with underwater emergency shut-off valves on pipelines.

The Department of Energy said the document was likely to be issued tomorrow. The failure of an emergency shut-off valve on board the Piper Alpha platform is now suspected to have been a significant contributing factor to the severity of the explosion and fire that ripped the platform apart on July 6, causing much of it to topple into the sea.

The directive is expected to be the first interim report from the department's technical inquiry into the causes of the Piper Alpha disaster. A final report is expected to be ready in late September, although this may not be released directly to the public, but rather to the public disaster inquiry headed by Lord Colleen at Aberdeen.

It is now believed that, after an initial explosion at a gas compressor on the platform, compressed gas in the 90-mile-long export pipeline to the Frigg gas line came rushing back to Piper Alpha, supplying a massive amount of explosive fuel to the fire on the platform. Experts say that oil and gas

Such valves would be designed to close automatically in the event of an incident on board a platform and would be far enough away to be unaffected by fires or explosions. The major oil companies, however, disagree about whether reliable technology is currently available for retrofitting existing installations with such valves.

The public inquiry is likely to start in October but could take a year before issuing any final report with broader safety recommendations for the industry.

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Englishmen raise glass to all-day drinking

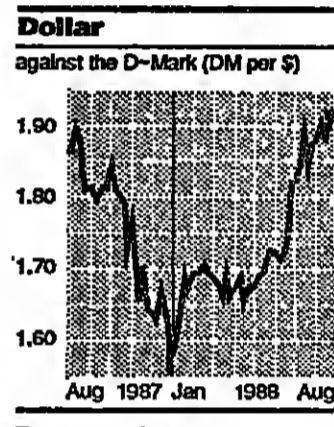
By FT reporters in London

BRITONS stayed in their pubs yesterday, or at least more of them did for more of the day. This was because of a historic change in legislation, made after much heart searching in the highest councils of the land, that pubs (bars to the uninitiated) may now stay open all day.

Central banks fail to keep lid on lively dollar

By Simon Holberton, Economics Staff, in London

THE DOLLAR yesterday brushed aside another round of concerted central bank intervention, closing higher in London and prompting speculation of further rises in European interest rates.



Frequent bouts of central bank intervention succeeded in knocking the US currency off its highs of the day, but it was not enough to change the market's generally positive view of the US currency over the medium term. Throughout the day, currency markets tested key levels for the dollar and for the yen against the D-Mark. By the London close, the dollar had firmed more than 2 1/2 plemies, while the yen straddled Y70 to DML. Most central banks in Europe, including the Bundesbank, the West German central bank, and the Bank of England, together with the US Federal Reserve, were involved in the attempt to stem the dollar's rise.

Europe cautioned the currency markets against complacency. The UK Treasury reaffirmed the Louvre Accord, which it said was alive and functioning. The Treasuries and central banks of the G7 were in close communication, it said. In continental Europe, monetary officials hinted that the recent co-ordinated intervention, which they conceded were more public demonstrations of intent rather than a large-scale selling of dollar, might be a prelude to a much more concerted move on the US currency.

The US currency is seen by market operators to be well supported by the current level of US interest rates and by an apparent division in the ranks of the G7 major industrialised countries over the operation of the Louvre Accord. Analysts believe the US presidential elections in November are also acting as a constraint on G7 policy co-ordination and this is positive for the dollar over the medium-term. But monetary officials in London and continental

Analysts said that the recent forays of central banks into currency markets had not been very aggressive. They interpret the current US and G7 policy as simply holding the line until Mr George Bush, the Republican

Bush withdraws Quayle from front line of election campaign

By Lionel Barber in Washington

VICE-PRESIDENT George Bush has been forced to withdraw his chosen running-mate, Senator Dan Quayle, from the campaign front line because of the controversy still swirling about his military service during the Vietnam war.

As Mr Bush delivered a speech to the Veterans of Foreign Wars convention in Chicago and strongly supported his running-mate, Mr Quayle underwent coaching sessions in Washington devoted to explaining why he used wealthy family connections to gain a place in the National Guard rather than fight in the Vietnam war.

Mr Bush's decision to appoint a little-known and inexperienced running mate is considered to be a blunder which will continue to haunt his campaign for weeks. As Mr James Reston, the veteran New York Times commentator wrote yesterday: "His (Bush's) judgment is now an issue more than ever - not whether this bird from Indiana can fly or whether he dodged the Viet-

nam draft but whether Bush would pick the best available people to help govern the country."

Senator Robert Dole of Kansas, who was considered a strong choice as a running mate for Mr Bush, kept the controversy alive saying that Mr Quayle's presence on the ticket was hurting the Vice-President.

Senator Dole, himself a war hero, said: "I must tell you, in my generation, you knew who was in the Guard and who was in uniform fighting for their country."

Other political commentators said that the inevitable rash of stories about Mr Quayle and his past would obscure Mr Bush's best efforts to get his message across to voters. This is doubly infuriating for the Vice-President who appears to have bounced ahead of his Democratic rival Governor Michael Dukakis of Massachusetts in the latest opinion polls.

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MARKETS table with columns for Taiwan, Sterling, Stock Indices, Dollar, Interest Rates, and Gold.

Table with columns for The UN has grown in stature with its recent successes and Management UK accountants' ambivalence towards the smaller client.

Table with columns for Europe, Companies, and various market indicators.

OVERSEAS NEWS

Burundi 'using helicopters' to kill civilians

BURUNDI'S dominant Tutsi tribe has been using helicopters, armoured vehicles, machine-guns and bayonets to slaughter the unarmed peasants of their ancient enemies, the Hutu, according to eyewitness accounts from refugees streaming into neighbouring Rwanda, Reuter reports from Kigali, Rwanda. Tribal bloodshed has raged for a week in northern Burundi. The military government in Bujumbura told Western diplomats yesterday that the death toll was about 5,000 and calm had been restored. Official Burundian accounts have spoken only of attacks on Tutsi by "traitors and outsiders". Tutsi refugees who fled to Rwanda in the first few days of last week were followed by a much larger flood of Hutu who said the army, dominated by the Tutsi, had moved in on Wednesday and launched a reprisal slaughter of the Hutu. According to a Western diplomat in Bujumbura, the Foreign Minister, briefed foreign envoys yesterday, saying an estimated 5,000 people had died in outbreaks of violence. He did not mention killing by the armed forces, the diplomat said by telephone. The area of the killings is closed to outsiders. Officials and UN refugee workers on the Rwandan side of the frontier have heard countless horrifying stories of the army massacres from the 35,000 Burundians who have fled north across the Akazuru River. Mr Code Classe, representative in Rwanda of the UN High Commissioner for Refugees, toured the border area at the weekend and said: "We cannot talk about a civil war because only one side is armed. It has become a massacre by the Burundian army." The Tutsi dominate the central African state's politics and army. The Hutu make up 85 per cent of the population. The killing has sent 35,000 people, mainly Hutu, fleeing into neighbouring Rwanda with tales of army reprisals against many thousands of defenceless peasants. The Tutsi, a cattle-herding people, have lorded it over Hutu farmers in the fertile well-watered lands at the northern end of Lake Tanganyika since pre-colonial times. Rwanda has a similar tribal make-up but the Rwandan Hutu overthrew Tutsi domination at the end of Belgium's colonial rule. The Hutu big bout of tribal bloodletting in Burundi took place in 1972 when the Tutsi responded to a Hutu challenge with mass slaughter and the death toll was put by foreign experts at 100,000 or more.

International appeal for Somali refugees

THE WORLD Food Programme yesterday appealed for urgent international assistance to help tens of thousands of Somali refugees flooding into Ethiopia. At least 300,000 Somalis are estimated to have crossed the border to escape the civil war in northern Somalia, and food, clean water and shelter are all scarce in the refugee camps. "In a mere matter of weeks the number of Somalis seeking safety in Ethiopia has skyrocketed," said James Ingram, WFP's executive director. "The international community must act immediately. Ethiopia does not need another crisis." WFP field workers regard the situation as desperate, with up to 4,000 people a day fleeing into south-eastern Ethiopia. WFP, the food aid arm of the UN, says it has already diverted some food from other operations to cope with the emergency and has budgeted an extra \$6.7m to feed 200,000 refugees in Ethiopia's Hararge region for six months. Rebels of the Somali National Movement launched a sudden offensive at the end of May. The fighting followed a peace agreement between Somalia and Ethiopia which apparently deprived the SNM of its Ethiopian bases and forced it to consolidate its position inside Somalia. Foreigners were evacuated from the north.

Bhutto confident of poll win 'if election is fair'

MS Benazir Bhutto, Pakistan's opposition leader, said yesterday her Pakistan People's Party (PPP) could win National Assembly elections scheduled for November after the air-crash death of military ruler President Zia ul-Haq, Reuter reports from Karachi on US television. Ms Bhutto said big rallies had demonstrated widespread popular support for her party. "The People's Party is the largest party in the country, it's the most popular," she said. "I am absolutely sure the Pakistan People's Party will get a victory in the forthcoming elections if they're fair and party-based." She said it has been "a big surprise and a welcome one" that the army chose to extricate itself from the political field by showing restraint since the death of Gen Zia, who ruled for 11 years. Gen Zia died last week in an unexplained air crash that also killed Mr Arnold Raphael, US Ambassador, and Brigadier General Herbert Wassom, the US military attache in Islamabad. Ms Bhutto, 35, has been the most prominent member of the PPP since 1978 when Gen Zia executed her father, Zulfikar Ali Bhutto, who founded the party. She declined to speculate whether Gen Zia's death may have been caused by sabotage of his aircraft, which crashed minutes after take-off last Wednesday from Bahawalpur, south of Lahore. "All we say is let the investigation take its course," she said. "Because otherwise in a way it's telling the army that the civilians are going to start blaming you and so you better take over or do something to secure your own position and that's something we don't want."

S Korea head in Manila restaurant shooting

THREE gunmen fired shots into a restaurant during a party for South Korean opposition leader Kim Dae Jung on Monday, wounding two bodyguards from Fidel Ramos, the Philippine Defence Secretary, a private television station reported, Reuter reports from Manila. Kim and the other members of the Government-hosted party, including Mr Ramos, were unhurt but one of the gunmen was seriously wounded, ABS-CBN Channel 3 said. Police confirmed the shooting but refused to give details. The television station identified the assailants as members of the paramilitary Philippine Constabulary. Mr Ramos, interviewed at the scene, said that Kim was unperturbed and that the party continued despite the incident. "This is not necessarily aimed at him [Kim], it could be aimed at anyone of us... authorities are in control. We are taking action," Mr Ramos told a television interviewer. Kim arrived in Manila last weekend to attend Sunday's commemoration of the fifth anniversary of the assassination of President Corazon Aquino's husband, Benigno. He is due to leave tomorrow. The shooting broke a window in the restaurant where Kim was attending a farewell party in his honour. Police said initial investigations indicated the occupants of the car, two men and a woman, ran to pass through the street where the restaurant was located but were stopped by police manning a checkpoint. Witnesses said one of the men in the car got out and shooting broke out.

S Africa blamed for uprooting of 6m people

ABOUT 6m people have been turned either into refugees or displaced persons in the countries bordering South Africa, as a result of the conflict between Pretoria and the Front-line states. This estimate was made yesterday by Mr Javier Perez de Cuellar, the UN Secretary-General, speaking at a conference in Oslo on southern African refugees convened by the Organisation of African Unity (OAU) and endorsed by the UN General Assembly. Norway, under Prime Minister Gro Harlem Brundtland, has taken over from Sweden, Falme, as the most important Nordic country diplomatically. The aim of the gathering is to focus the attention of the world on the plight of the 6m uprooted people and adopt a declaration and plan of action to ease the crisis. "It can no longer be ignored by the international community," Mr Robert Mugabe, Zimbabwe's President, told the delegates from 81 different states. Unlike most other areas of Africa, the desperate situation in the southern part of the continent is almost entirely due to war and not natural disasters. "Any lasting solution to the crisis depends on the end of apartheid," said Mr Perez de Cuellar. A background paper prepared for the conference said that South Africa was "engaged in undeclared wars against its neighbours." The UN estimates that as many as 5m people have either been displaced or affected by the civil wars in Angola and Mozambique, while a further 1m have been forced to flee for their lives and seek refuge in neighbouring states. In Malawi alone there are believed to be 450,000 refugees in a country of just under 8m. They have come there from Mozambique, escaping the terror campaign of the South African-backed Renamo organisation. A further 166,000 have fled to Zambia, where a fifth refugee camp is about to be opened. 136,000 to Zambia, and 72,000 into Tanzania. The UN High Commissioner for Refugees estimates that just over 3m people have been displaced in Mozambique by the internal armed conflict. In a document prepared for the conference, the UN calculates that it will cost \$550m a year for the foreseeable future to resolve the refugee problem in southern Africa. "The cost of rebuilding the economic base of the area will be high," it admits. "But combining emergency assistance with sustainable rehabilitation and development of the economy will be much more cost-effective than simply continuing emergency humanitarian aid on its own." The UN has costed a programme for revival in the region. This would involve rebuilding destroyed homes (\$30m annually), providing safe drinking water (\$25m), sanitation (\$15m), dealing with land erosion (\$30m), repairing roads and bridges (\$50m), and above all rehabilitating the area's agriculture (\$150m), improving food distribution (\$20m) and building up food stocks (\$40m). On top of this, the UN believes a further \$100m a year will be needed for health support and a similar amount spent on education.

EUROPEAN NEWS

Soviet co-operatives take off in a big way

By John Lloyd in Moscow

THE SOVIET co-operative movement, which put down tentative roots some two years ago, is growing explosively, according to the first official figures. It is also now able to pay its workers, on average, between 1.5 and two times more than wages in state enterprises - and public opinion, which was initially distrustful, is now swinging heavily in its favour. A survey in the newspaper Economic Gazette says that opinion polls show more than two-thirds of those polled

favour co-ops, against a third of those polled a year ago. A residue of popular distrust that they are profiteering does remain, however, exemplified in the popular joke which runs: "Do you want to hear the joke about co-ops? 'Yes.' 'Give me a rouble.'" In the year from July 1987, the total number of co-ops in the Soviet Union grew from 3,709 to 33,561. Their total turnover increased from Roubles 29.2m (\$46.7bn) to Roubles 1.04bn in the same period. Just over half (16,324, with a

turnover of Roubles 528m) are in the Russian Republic. Ukraine has 5,268, turning over Roubles 151.8m. The republics of Byelorussia, Kazakhstan, Uzbekistan and Gruzia have more than 1,000 each. The small but enterprising Baltic republics of Estonia, Latvia and Lithuania have respectively 609, 540 and 917. More than a third provide various types of domestic services, an area particularly neglected by the state, over 5,000 are in catering, presumably mainly restaurants, over

7,000 make some form of consumer goods, 5,640 offer transport, sports and other facilities, and over 1,600 use the waste or discarded equipment from plants in some form of recycling process. Economic Gazette says that co-operatives have the immediate potential to employ several million more workers "on the basis of customer demand". Surveys show, it adds, that the most successful and profitable - such as the Estonian Iris co-operative - are those which diversify into several different

activities. The Iris co-operative produces car parts, servicing cars, making clothes and digging peat. The law on co-operatives, passed last month, allows them to build houses and roads, conduct scientific research, offer tuition courses, and mine minerals and other natural resources. Shareholding is now gradually spreading, allowing them to grow and also "giving the people who hold the shares the feeling of being their own bosses".

W German M3 grows less fast

By Andrew Fisher in Frankfurt

WEST GERMANY'S money supply growth slowed last month, but still remained above the target range set by the Bundesbank for this year. Further heavy fund outflows abroad also occurred as investors sought higher returns. The Bundesbank said that M3, the broad monetary aggregate, rose in July at a seasonally adjusted annual rate of 6.7 per cent over the level at the end of last year compared with 7.4 per cent in June. Its desired range for M3 is 3-8 per cent. The bank's targets have been overshoot for two years running, mainly as a result of heavy inflows associated with speculation on a rising D-Mark. This year, however, the currency has weakened, especially against the dollar. The bank switched to M3 this year from its traditional central bank money stock, arguing that this better reflected monetary growth and velocity trends. Central bank money stock is made up of cash in circulation and banks' minimum reserve deposits at the Bundesbank. The investment outflow in July totalled DM10.9bn (\$3.4bn) compared with only DM0.8bn in June. The higher returns obtainable in foreign markets have prompted heavy movements of funds abroad this year, especially to the US, the UK, Australia, and Canada.

Skies grow clearer over Cyprus

"THIS WILL not be a repeat of 1985." The phrase, half statement, half incantation, recurs on the lips of officials cautiously assessing the chances of success of the UN-led Cyprus peace talks scheduled to resume after a three-year break in Geneva tomorrow. The key participants will be Mr George Vassiliou, elected president of Cyprus last February by the island's Greek-Cypriot majority community, and Mr Raouf Denktash, leader of the Turkish Cypriots. The latter unilaterally declared an independent state in 1983 in the northern third of Cyprus occupied by Turkish troops. This state is recognised only by Turkey, which sent its troops to Cyprus in 1974 following a Greek junta-led coup against the government of Archbishop Makarios. The Turkish intervention led to the partitioning of the island. Restoring the political unity of the Cypriot state is the essence of the problem. In two high-level agreements reached in 1977 and 1979, the two communities took a major step by agreeing that the basis for a settlement should be the setting-up of a bizonal federal republic. Since then, however, negotiations on the details have made no progress. Memories are still fresh of the last, disastrous, attempt to get the two sides to agree a settlement made by Mr Javier Perez de Cuellar, the UN Secretary-General, in January 1985. The participants at that meeting were Mr Vassiliou's predecessor, Mr Spyros Kyprianou, and Mr Denktash. The talks collapsed almost immediately, ostensibly over procedural differences but in reality because of key disagreements on issues of substance. Mr Denktash insisted that the two sides immediately sign a UN draft settlement plan sketching out the constitutional and territorial arrangements for a bizonal federal state and then relegate all outstanding issues to joint working groups. Mr Kyprianou countered that the draft failed to address issues considered vital to a workable settlement by the Greek Cypriots - mainly Turkish troop withdrawal, guarantees for a settlement, and arrangements regarding the right of movement, property ownership and settlement within the state. He called for negotiation on these issues before agreeing to sign any of the tabled documentation. The past three years have been spent by the Secretary-General trying to repackage the 1985 documents to suit both sides. Not least among the reasons for his failure has been the negative personal chemistry which developed between Mr Kyprianou and Mr Denktash. Independently of this doomed process, however, the political landscape gradually changed in significant ways. Greece and Turkey, whose relations have been tense since the 1974 Cyprus crisis, unexpectedly warmed to each other when their Prime Ministers met in Switzerland last January and undertook to resolve all differences peacefully. One month later, in Cyprus, Mr Kyprianou lost presidential elections to Mr Vassiliou, a pragmatic businessman who has injected a new vitality into the moribund peace process. In the interim, too, Turkey has launched its bid for closer ties and eventual membership of the European Community. Although Turkish officials emphasise that there are limits to the price Ankara will pay to achieve its goal, they recognise that a Cyprus settlement would facilitate the process. Not only is Greece committed to vetoing Turkish accession as long as occupation troops remain in Cyprus, but recent European Parliament reports indicate a broader EC concern for Cyprus. Against this background the two sides

in Cyprus have been induced to drop previous preconditions in order to come to the negotiating table. The Greek Cypriots, while still stressing that the resolution of the three issues identified in 1985 by Mr Kyprianou lies at the core of any settlement, no longer insist on advance discussion of these. Mr Denktash, for his part, no longer insists that the Greek Cypriots accept a March 1986 version of the 1985 UN draft settlement plan as a basis for accepting any negotiations. Instead he has contented himself with a reference to UN documents prepared at earlier stages of the peace process in 1980, 1981 and 1984 which include elements regarded as positive by the Turkish-Cypriot side, such as noting that freedom of movement in the proposed state must be decided upon bearing in mind certain "practical difficulties". These documents will not, however, be considered binding on either side. The statement to be read by Mr Perez de Cuellar after a scheduled Vassiliou-Denk-tash meeting has already been prepared and approved by both sides in months of behind-the-scenes diplomacy by UN officials. It will effectively send the two sides back to the drawing board by re-emphasising their commitment to the 1977 and 1979 high-level agreements, but will not suggest a framework for what they should agree on beyond those accords. The statement will set a June 1988 deadline, regarded as ambitious by many but insisted on by Mr Vassiliou, for the completion of talks, in which the two leaders will be involved as much as possible. Because of this high degree of personal involvement, all sides set great store by the rapport that may or may not be established between Mr Vassiliou and Mr Denktash in Geneva. It is clear, however, that it will take a lot more than chemistry for the Geneva talks to prove, as Mr Vassiliou said not long ago he hoped would be the case, "the beginning of the end of the Cyprus problem."

Andriana Ierodiakonou reports as the leaders of the two communities meet in Geneva.

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Turkey aims at 20% inflation

By John Griffiths

WEST EUROPEAN new car sales this year will reach 12.4m units, a record for the industry at the start of this year that 1988 would see a downturn. Instead, sales in the first half of the year were up 5.7 per cent at 6.8m. AID is predicting particularly strong growth for Spain - sales were up by more than a quarter in the first half and forecasts a 1m-plus market for the first time. AID Newsletter, 34 St John Street, Lichfield, Staffs., England WS13 6PB. £240 pa for 24 issues.

Record car sales forecast for W Europe

By John Griffiths

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Kohl dogged by political troubles

By David Goodhart in Bonn

MR HELMUT KOHL, the West German Chancellor, is unlikely to be able to prevent the political troubles of his uneasy coalition Government returning after the summer break, according to a report in the magazine Der Spiegel. Spiegel claims that the Government's latest (unpublished) opinion polls paint an increasingly gloomy picture with the opposition Social Democratic Party now clearly in the lead despite the better than expected economic news of the past few months. Spiegel also claims that more than 6,000 members of the Chancellor's Party - the Christian Democratic Union - have resigned over the past few months, mainly in response to the row over aspects of the tax reform package. The Chancellor, who returned to work himself yesterday, will find it hard to project an image of confidence and unity in the coalition with the prospect of an autumn cabinet reshuffle, which is already dominating the political news.

Yugoslavs agree the medicine but not the regimen

Judy Dempsey describes the rival treatment methods which are being prescribed for a sick economy

YUGOSLAVIA'S fragile political and economic system suffered another blow at the weekend after thousands of Serbs and Montenegrins demonstrated against alleged persecution of their fellow Slavs in the autonomous southern province of Kosovo. Kosovo, which is constitutionally linked to the republic of Serbia, was the scene of bitter nationalist riots in 1981. During that stormy period, the largely ethnic Albanian population called in vain for the province to be given the status of a republic. However, today, the combination of a deteriorating economy in one of the country's poorest regions and the growing number of Serbs leaving the province largely for economic reasons, has heightened the sense of instability. Economists now believe that one of the ways out of the deepening crisis, which is increasingly tinged by nationalism, is through implementing radical economic reforms. Surprisingly, in a country where consensus is almost impossible to attain, the medicine being prescribed by party officials and economists to the Yugoslav economy is the same. However, while some senior politicians want the patient to remain in bed for most of the time, others believe it is only by walking without crutches that the patient will gain strength. It is this crucial difference which will, in the view of Slovene politicians and economists, make or break Yugoslavia's ability to pull the economy out of its worst post-war crisis. The difference in the economic therapy is most apparent in the two special commissions which are looking at ways to reform the economic system. One is headed by Mr Branko Mikulic, the beleaguered Prime Minister, the other by Mr Slobodan Milosevic, the tough Serbian party leader. They both believe that what is needed is a reform of prices, an overhaul of the management of enterprises, and radical changes in legislation to attract foreign and private investment. The crucial difference is how such reforms will be implemented. The Mikulic commission believes that only through increased political and economic decentralisation can reforms have any real bite. This would mean allowing enterprises greater financial independence. It would also mean that managers could look for outside investments. Above all, private enterprise, including agriculture, would be expanded, and enterprises would be allowed raise private capital. "We have to let the economy breathe," says Professor Alex-

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OVERSEAS NEWS

Burmese cities see new wave of demonstrations

By Richard Gourlay in Bangkok

HUGE anti-government demonstrations were held yesterday in Rangoon and Mandalay, and other towns, as the Burmese people took to the streets against the appointment last week of U Maung Maung as the country's leader, Rangoon based diplomats said.

Housing shortage that can destroy friendships

K. K. Sharma, in New Delhi, reports on how India's high rents have hit the middle classes

MR Seed Naqvi is a prominent editor in New Delhi whose wife insisted 12 years ago that he build a low-cost house on a cheap 500 sq m plot he had acquired under a scheme for a journalists' colony.



Professionals, and their video recorders, are being forced into slum areas such as this in Bombay

The 20-year-old friendship collapsed the day Mr Naqvi returned to Delhi and tried to live in his house. The friend simply refused to move out and the two have been fighting a bitter battle in court ever since.

areas. The housing shortage is thus not limited to a few metropolitan areas but afflicts the entire country. The result is that slums have proliferated. The main reasons for the problem are the rapid increase in population, the fast rate of urbanisation, inadequate attention to the housing stock owing to rising prices of land and construction materials and inadequate investment in housing.

Hawke shuffles four of his Cabinet ministers

By Chris Sherwell in Sydney

MR BOB HAWKE, the Australian Prime Minister, yesterday announced four Cabinet changes following last week's resignation of Foreign Minister Bill Hayden to take up the post of Governor-General.

Shamir benefits from uprising

By Andrew Whitley in Jerusalem

A SPATE of Jewish-Arab violence in previously untroubled parts of Israel has brought many Israelis face-to-face with the Palestinian intifada for the first time, and strengthened Prime Minister Yitzhak Shamir's bid to win the November general election.

Islamic militants seek to lead West Bank protest

By Andrew Whitley

A DETERMINED attempt by the fundamentalist Islamic Jihad movement to set the pace of the uprising in the Israeli-occupied West Bank is worrying many Palestinians and causing concern to the Israeli authorities.

Korean talks break down

By Maggie Ford in Panmunjom

TALKS between the two Koreas, the first for three years, broke up yesterday with no agreement or firm date for a further meeting.



How to "K"eep Ahead in Shipping.

Keep counting on "K" Line, the company that developed containerization in Japan and still holds the lead. Our 200 ultramodern ships - with a 10 million-ton capacity - ply 30 global routes linked by a highly efficient system.

Advertisement for K-Line shipping services, including contact information for various offices and a list of services like containerization and cargo handling.

THE BRITISH BANK OF THE MIDDLE EAST LEADS THE WAY IN SOPHISTICATED BANKING SYSTEMS.

Advertisement for The British Bank of the Middle East, highlighting its sophisticated banking systems and global reach. Includes a large image of a person's hands and text describing the bank's commitment to service.

Footer for the British Bank of the Middle East advertisement, including the bank's name in Arabic and English, and a list of regional offices.

AMERICAN NEWS

US bomber may need \$8bn boost says Congress

AMERICA'S troubled B-1B bomber may require \$8bn in improvements to boost its ability to carry nuclear weapons deep into the Soviet Union, a congressional report said yesterday. Reuter reports from Washington.

Kabul tops US state terrorism list

By Lionel Barber in Washington THE Soviet-backed regime in Afghanistan repeatedly attacked civilian targets in Pakistan in 1987 and was responsible for well over half the incidents of worldwide state-sponsored terrorism, a US State Department report said yesterday.

Latin America fails to lure the UK

Robert Graham on why Mrs Thatcher has never made a formal visit to the continent

LATIN Americans have a reputation for staying up late. Thus it was suitably symbolic that Britain's House of Commons should debate the affairs of Latin America in the early hours of the morning.



Chalker: more Spanish

plete attempt to discuss the long term implications of Britain's policy towards the Falklands.

This mirrors with reasonable accuracy the two levels of concern in Britain today about Latin America.

Then there is a sub-culture of well organised issue-orientated groups (essentially the Left) anxious that British policy should be more committed to such causes as the Sandinistas in Nicaragua and the anti-Pinochet movement in Chile.

Although the Commons debate could not have been held at a less auspicious hour, its occurrence provides a marker. It should be seen less in the context of previous neglect, and much more against a background of awareness of Latin America.

trough in the 1970's so that it now accounts for some 3 per cent of commerce with Britain. Mrs Thatcher's critics maintain she has identified Britain too closely with US policy in the region especially over Central America.

So long as conflict with Argentina is a possibility such considerations persist. Yet a momentum has been established for broader based contact which now calls for the symbolic gesture of a prime ministerial visit to demonstrate Britain's seriousness in Latin America.

Symbols apart, the Commons debate highlighted the need for better and more extensive tuition of Spanish and Portuguese in schools to create a more solid long-term base for ties with Latin America.

Six charged over plan to attack Nicaragua

SIX Cuban-born Americans were yesterday charged with training and equipping commandos at a Florida base camp for operations against Nicaragua's Sandinista troops, Reuter reports from Miami.

Argentine metal workers win 47.4% pay increase

By Gary Mead in Buenos Aires ARGENTINA'S powerful metal-workers' union (UOM) has negotiated a 47.4 per cent pay increase on basic wages, defying Government attempts to limit pay settlements.

Trinidad opts for austerity

By Carole James in Kingston FACING A rapid deterioration in its oil-based economy, the Trinidad and Tobago government has introduced substantial cuts in spending which are expected to raise the ire of the trade unions and increasingly restive public servants.

WORLD TRADE NEWS

Hungary and Israel set for stronger links

By Judy Dempsey in Vienna TRADE between Hungary and Israel looks set to rise sharply over the next few years, the visit earlier this month of a high-level team of Hungarian economists and trade officials to Jerusalem.

Peking invests more abroad

FROM real estate in Florida to chickens in Australia, China is investing more abroad in a move diplomats and economists say is a sign of its growing role in the world economy, Reuter reports from Peking.

Helsinki pays for Finnish export success

Olli Virtanen reports on concerns over Finland's huge trade surplus with Moscow

FINLAND'S huge trade surplus with the Soviet Union and increasing concern about a possible devaluation of the overvalued Finnish markka have led to a payment order through Vnesheconombank to the administrative 'clearing rouble' and they are cleared in the Bank of Finland, the country's central bank, and in the Soviet foreign trade bank, Vnesheconombank.

very much lopsided in Poland's favour. After the Second World War the Soviet Union made trade agreements with practically all its trading partners, Eastern and Western alike. Today Finland is the only remaining Western country that has the barter pact in use.

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South Korea to reduce average tariff rates

THE South Korean Government announced yesterday that it will lower average tariff rates on 2,677 items from 18.1 per cent to 12.7 per cent by next year and gradually to 7.9 per cent by 1993, AP-DJ reports from Seoul.

China economic zone ahead on property policy

AFTER nearly a year of experimenting with free-market tools such as land auctions and tenders, the Government of China's Shenzhen economic zone has found strong demand for property in the zone, AP reports from Shenzhen.

Japan may study impact of EC on car industry

JAPAN'S Government and the nation's car industry are expected to set up a study group to assess the possible impact of a unified European Community (EC) market on Japanese motor vehicle manufacturers, a Japanese trade official said yesterday, AP-DJ reports from Tokyo.

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**If The Independent burnt to the ground
would the paper go up in smoke?**



The obituary writers might well have their pens poised.

But The Independent cannot be written off that easily. Not if Commercial Union has anything to do with it. As well as insuring The Independent building, we have put together a specific policy (in partnership with Bain Clarkson, their broker) to cover the contents.

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To report on many other burning issues no doubt.



We won't make a drama out of a crisis.

UK NEWS

Plessey wins fight for Nato defence project

By David White, Defence Correspondent

PLESSEY, the UK defence and electronics group, has won a battle against Cosser Electronics, subsidiary of the US company Raytheon...

The Ministry of Defence's appointment of Plessey's avionics arm as lead contractor is the last of a series of nominations by major European allies under the Nato Identification System (NIS) scheme.

Each country was given responsibility for its own feasibility studies, project definition and development of its own equipment.

The NIS project, which is expected to cost in the region of £10bn overall, is designed to replace current IFF (Identification Friend or Foe) systems...

The UK company is now under instruction to discuss a possible link-up with Siemens, the West German lead contractor...

Compatibility within West Germany is seen as especially crucial because of the concentration of forces there.

Thomson CSF of France, Italtel of Italy and Ceselca of Spain have already been appointed to head national programmes under the scheme.

A US contract is currently under competition. The planned new family of systems, for use in the air, at sea and on land...

Plessey and Cosser were linked at an earlier stage of the project in a joint company, Identification Project Partners.

Chunnel builder faces penalty for mounting delays

By Kevin Brown, Transport Correspondent

EUROTUNNEL, the Channel Tunnel group, said yesterday that it had issued a formal warning to Transmanche-Link (TML), the construction consortium, over mounting delays.

The warning is the first towards a claim for compensation by Eurotunnel, which claims TML is 13 weeks behind schedule in the UK, and around 12 weeks late in France.

Eurotunnel is a consortium of the Channel Tunnel Group of the UK, and France Manche of France. TML is a joint venture of five British and five French construction groups.

Eurotunnel says TML met its first deadline, for the start of work on the service tunnel from the UK, but started late in France and failed to complete one kilometre of tunnelling on the French side by the agreed date of July 1.

It was "very unlikely" to meet the next deadline, which is for the completion of five miles of tunnelling from the UK by November 1.

Eurotunnel said: "Nothing irreparable has happened yet, but TML are not yet managing the tunnelling programme to our satisfaction, hence the formal notice."

"TML has made changes in line management, but we wish them to present their plans for sufficient progress to maintain the construction programme."

Eurotunnel said it would claim "advanced liquidated damages" under its contract with TML if the construction consortium failed to meet the November deadline.

This is a fixed sum agreed when the contract was signed. It is intended as a penalty to discourage slow working, rather than an attempt to recompense Eurotunnel for lost income caused by a delay in bringing the tunnel into use.

Eurotunnel refused to disclose the size of the penalty. But the company said: "It is not just pennies. It is cause for TML to worry. That is why they will have to come back to use with some serious answers."

Eurotunnel said it did not expect the delays to affect its plans to draw the first tranche of its £5bn bank borrowings in the autumn.

Mr Andrew McDowall, chief executive of TML, declined to respond to Eurotunnel's announcement. But TML released a letter from Mr Alistair Morton, joint chairman of Eurotunnel, warning the consortium not to comment.

Mr King, said after visiting survivors of the bombing at the Tyrone County Hospital in Omagh, that the Government would never capitulate to terrorists. "We are reviewing a number of issues. Action will be taken. We will pursue the terrorists in the most effective way we can."

Mrs Margaret Thatcher, the Prime Minister, and Mr King are to meet this week to discuss possible measures. Neither minister gave any hint of what steps were being considered.

"You do not tell your enemy what you are going to do," the Prime Minister said during a visit to Devon.

"We must never let the terrorists win," she said. "That is why we are having a thorough review of all matters."

With internment of suspects without trial apparently ruled out by ministers' scepticism about its effectiveness, it is thought that a strengthening of troop numbers in the province, currently standing at 10,200, is under consideration.

In a day of hectic political activity in Ulster, the Rev Ian Paisley, Democratic Unionist leader, claimed that the main Omagh to Ballygawley road, where the soldiers died, was

Tighter Ulster security measures under way

By Our Belfast Correspondent and Tom Lynch in London

ADDITIONAL security measures will be taken to combat the IRA in Ulster following the weekend bomb attack which killed eight British soldiers in Tyrone, Mr Tom King, Northern Ireland Secretary, said yesterday.

Mr King, said after visiting survivors of the bombing at the Tyrone County Hospital in Omagh, that the Government would never capitulate to terrorists. "We are reviewing a number of issues. Action will be taken. We will pursue the terrorists in the most effective way we can."

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Mr Tom King in Ulster yesterday where he visited soldiers injured in the weekend bomb attack

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ICI to raise capital spending sharply on bulk material output

By Peter Marsh

IMPERIAL Chemical Industries, Britain's biggest chemicals company, plans to spend £300m a year during the early 1990s on capital investments related to bulk materials production, a rise of 60 per cent, on present annual spending.

About half the cash will be spent at the company's overseas plants, mainly in Europe and the US. The remainder will be spent at ICI's main bulk-chemicals manufacturing sites on Teesside in north-east England and Merseyside in the north west.

The investment programme will focus largely on raising the output of existing production facilities and on cutting waste material emissions to comply with stiffer environmental laws.

Relatively little money will go towards building new plants. The investment is therefore unlikely to create many new jobs.

The ICI plans, drawn up over the past few months, reflect cautious optimism across the chemicals industry about future prospects after a difficult period since the early 1980s.

Many companies, ICI among them, have cut capacity and employment over the past few years following the industry's steep recession at the start of the decade.

Rising demand in the past two years has led to an increased desire to sanction big investment programmes, although not on the scale of the 1970s. The sector then contributed to this decade's over-capacity by building too many plants, according to many in the industry.

ICI's programme will affect activities in its chemicals and polymers group, the company's biggest subsidiary which is responsible for two-fifths of its £1bn annual output. The group is responsible for all of ICI's production of bulk materials made from basic chemicals like ethylene and chlorine.

The chemicals and polymers group is a world leader in making commodity plastics, industrial chemicals and fibres - areas of chemicals where growth rates are lower than those in the more specialist chemicals fields such as drugs and agrochemicals, but where profitability has in the past two years returned to reasonable levels.

N. Americans 'enjoy best spending power'

By Ralph Atkins, Economics Staff

CITIZENS in the US, Canada, Norway and Switzerland have the greatest spending power within the 20 states of the Organisation for Economic Co-operation and Development, official UK figures indicate.

Calculations by the Central Statistical Office also show that Britons have more spending power than Austrians, Belgians and Italians.

The figures indicate that the gross domestic product per capita in the UK compares more favourably with many other countries if exchange rates taking into account differences in purchasing power are used. The usual method is to use market exchange rates.

The CSO estimates use purchasing power parities: the exchange rate which would have to prevail if money, changed from one currency to another, were to retain the same purchasing power.

Using market exchange rates, for instance, GDP per capita in 1987 in Italy was 12 per cent higher than in the UK. But using purchasing power parities, UK citizens turn out to be slightly better off.

Market exchange rates do not allow fully for price differences between countries. The number of pounds sterling which would buy a selection of goods and services in the UK, will not necessarily buy the same selection elsewhere.

The CSO says that if GDP per head is calculated using purchasing power parities, comparisons between countries better reflect relative living standards. They are also distorted less by short-term movements in market rates.

The results generally show Britons to be wealthier than might otherwise be thought. GDP per capita in the UK turns out to be higher than in Italy, Austria and Belgium where market exchange rates would suggest it was lower.

Out of 20 countries in the Organisation for Economic Co-operation and Development covered by the CSO, Britain rises from fifth from the bottom to eighth from the bottom.

The CSO says there is also less variation between country what purchasing power parities are used. This means the gap between Britain and more affluent countries is lessened.

One notable difference is with Japan. Market rates would suggest that the Japanese are 68 per cent better off than UK citizens; CSO estimates show a difference of just 7 per cent.

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GDP PER CAPITA (UK=100) 1987

	At market exchange rates	At PPP exchange rates
UK	100	100
Belgium	121	96
Denmark	171	108
France	136	104
W Germany	157	109
USA	155	149
Canada	138	140
Japan	168	107
Austria	134	96
Finland	103	105
Norway	171	127
Sweden	165	112
Switzerland	223	130

*Purchasing power parity. Source: Central Statistical Office

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But consider this: Computer fraud is just the tip of a £5 billion fraud iceberg.

It is a fact that the majority of frauds are committed by disgruntled employees. That 75% of all frauds are for sums no more than £25,000. And that most frauds are discovered by accident or by tip-offs.

Unfortunately it is also true that many companies seem to have adopted a 'head in the sand' attitude to the whole problem.

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UK NEWS

Credit controls urged to help close trade gap

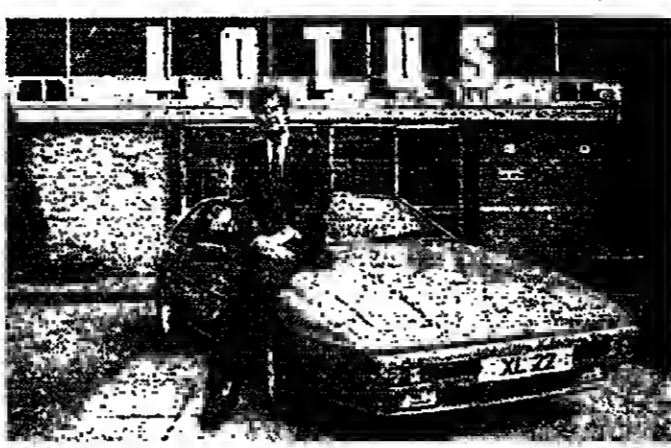
By Richard Donkin

A SHARP FALL in British export growth revealed in a business survey could lead to a wider trade deficit unless the Government moves to curb the credit boom with measures other than higher interest rates...

Charting a rising curve with Elan

Kevin Done finds Group Lotus glowing about prospects under GM

THE DYNAMIC performance of Group Lotus's cars has not always been matched by a financial ability to stay on the road.



Managing director Kimberley with the Lotus XL

Little more than five years ago the British sports car and automotive engineering group was still worrying how to pay the next monthly wage bill. But its balance-sheet worries were finally alleviated when General Motors took over the group in 1986...

Chrysler of the US it has re-engineered an existing engine as a high performance unit. (Most famously, or infamously, one of Lotus's earliest outside engineering projects was the design and development of the ill-fated De Lorean car.) Lotus pins its highest hopes on development of its computer controlled active suspension...

Space agency gives UK ultimatum on science spending

By Peter Marsh

THE 13-nation European Space Agency has given Britain until the end of the year to review its decision to block a proposed 25 per cent increase in the agency's science spending by 1994.

The discussion over the agency's spending - which other member nations want to see raised from its current annual level of about £130m to £165m by the mid 1990s - continues a running argument between Britain and other European countries over space projects.

Rectification

With the Board of Directors' consent the Board of Managing Directors has decided to set the half-yearly dividend of the 1988 financial year at NLG 2.30 per ordinary share of NLG 20,- par value.

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European business air fares 'too dear'

By Michael Dome, Aerospace Correspondent

MANY BUSINESS air travellers believe that European air fares are much too high, and that new classes of rates especially tailored for businessmen with greater flexibility of operation, should be introduced.

When is one bigger than two? When two big banks join forces to make one bigger bank. In January, 1988, Anadolu Bankasi and Türkiye Emlak Kredi Bankasi merged to form Türkiye Emlak Bankasi. By combining the assets of two major state banks, Türkiye Emlak Bankasi has emerged stronger, more efficient and internationally competitive. With a capital base equal to \$ 225 million, it is Turkey's third largest bank on the public sector.

Property prices start to level off, survey says

By Paul Cheeseright, Property Correspondent

THE DIZZY RISE of the residential property market in Britain appears to be slowing, according to the results of a survey of 185 estate agents carried out by the Royal Institution of Chartered Surveyors.

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MANAGEMENT: Small Business

Accountancy services

The Big Eight: on the horns of a dilemma

Richard Waters on the ambivalence of large firms towards small



Large accountancy firms have been rethinking their services for small businesses...

At one extreme, Deloitte Haskins & Sells, one of the profession's 'Big Eight'...

There is one underlying factor which binds these extremes. The large firms are now interested only in clients which have a need for a range of specialist (and often expensive) advisory services...

This is a significant change from earlier times when the large firms made a well-publicised play for the small company market.

That assault failed for a number of reasons. In some cases, neither the products on offer nor the delivery were right.

ber of their large clients of the future.

But, according to Barry Baldwin, national director of independent businesses at Price Waterhouse...

Price Waterhouse's fee for a new client is often fixed at a flat rate of £5,000, to avoid deterring potential clients with the high hourly rate of a large-firm accountant.

Further factors are the high cost associated with generating new clients, and the lower margins available on small company work.

rates to get them.

The key word on all the marketing men's tongues is 'growth', without it, companies do not generate the sort of management and financial problems that the big firms think they are good at sorting out.

'The business that slows down or starts to stagnate is not one we are likely to maintain a relationship with,' says Baldwin. He might have added that the same goes for a small company that thinks its accountants are only there to audit its books and fill in its tax return.

Each of these is potentially a huge market. For instance corporate finance - helping companies to raise money or buy and sell businesses - is something that small companies have usually done themselves, without the help of outside

advisers.

A survey published last week by Peat Marwick McLintock showed that, in three quarters of the acquisitions of companies of between £500,000 and £10m which took place in the first quarter of this year, no outside advisers were used at all.

Most small companies handled their own negotiations, made their own evaluations of price, and arranged whatever finance was needed.

Large accountancy firms have failed to meet needs like these. According to Peter Court, a partner in the business services division of Coopers & Lybrand...

Reminders or free credit?

Richard Waters on the problems of debt collection.

Does your invoicing policy encourage your customers to pay their bills late? If your practice is to send a string of reminders before taking tougher action, then the answer could be yes.

Smaller accountancy firms can also afford to take a less narrow view on their potential clients. The static company, after all, still needs accountancy services, though generally in a different package.

The owners of static, profitable family companies also have a need for investment and other types of personal financial planning advice - all things that make them a worthwhile proposition.

Only a genuinely local firm, however, has the sort of overhead structure that allows it to concentrate profitably on the basic business of accountancy: the provision of audit, tax and general financial advice to the vast number of small family companies which have no ambition ever to be floated on the Unlisted Securities Market or takeover another company.

For these firms the opportunities are enormous, says Hugh Aldous, managing partner of Robinson Rhodes, another national firm whose target market has become the fast-growing company.

In brief...

The London Enterprise Agency is starting its Seventh Design Engineer Programme in October 1988. Aimed at teaching design graduates how to run a business, the course, which is free, has been running for 2 1/2 years and more than 80 per cent of participants to date are still in business.

The course is designed for those graduates aiming to become self-employed. It provides a five-month training period and a further six weeks for market research. Each student receives up to £200 travelling expenses from the Training Commission and is assigned a personal tutor to help get the business off the ground and find premises and finance.

Cambridge Venture Management has merged with Shepherd & Jones, recruitment and personnel consultants of Bury St Edmunds in a move aimed at strengthening the science park company's management development resources.

CVM, which takes equity stakes in its clients' businesses, sees the deal as a way of merging its experience of the problems of fast-growing ventures with Shepherd & Jones' record in industrial psychology and executive search.

The Cranfield School of Management has devised a 'payment by results' programme designed to help entrepreneurs achieve substantial growth. Called the Business Growth Programme, it is run on a part-time basis over three months. During this time participants will be helped in devising a strategy and three-year plan.

The handbook contains nine chapters covering subjects from starting up a business to marketing and employee law. The appendix contains addresses of some 100 existing initiatives and advice centres for small companies.

From next month, young people in Derbyshire with a viable business proposition will have access to grants and low interest loans. As well as offering free advice and practical help, the Derbyshire Enterprise Board is making £100,000 available, the money having been provided through the Prince's Trust and the Atwell Trust.

Further details from Colin Barrow, the Course Tutor, or Gill Marshall, at Cranfield School of Management, tel: 0234 751122.

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For further details contact the Joint Administrative Receiver, Ralph S Proce on (0532) 444741 or Angus Martin on (0532) 452922.

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For further details please contact the Joint Administrative Receivers, R.G. Ellis or A.M.D. Bird.

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TECHNOLOGY

First revs for the volume plastic car

John Griffiths reports on breakthroughs in the use of plastics to make vehicles

The first small family cars with thermoplastic bodies could be in showrooms in six years' time if vehicle makers firmly grasp the opportunities presented by new composites, according to General Electric's plastics subsidiary in Europe.

The company asserts that one of the biggest obstacles to the adoption of plastics for car bodies in high volumes - how to dispose of millions of non-biodegradable panels annually - has been overcome.

Meanwhile, overall production costs and practicality, even at volumes of 250,000 units a year, can already be competitive with pressed sheet steel, says Richard McKechnie, design and engineering manager at GE Plastics' European automotive centre in Bergen op Zoom, the Netherlands.

McKechnie leads the GE team which recently unveiled the Vector, a four-seater car incorporating thermoplastics - mostly a material called Noryl G17. It is used for Vector's front and rear wings and tailgate outer skin.

Development work on the car is continuing under a three-stage programme which will eventually see even extensively stress-bearing body components replaced by plastics.

GE Plastics' European centre stress that they regard the Vector, a relatively innocuous-looking small hatchback, as important not for its design but for the fact that it was built with production and semi-production tools in order to demonstrate manufacturing viability.

The advantage of using plastic composites is that tooling costs are claimed to be only a fifth of those for metal-working equivalents. This opens the way for vehicle makers to

bring out a greater variety of models more frequently, says Paul van Hove, GE Plastics' manager of automotive operations in Europe.

However, the most important difference between the thermoplastics used for the Vector's body panels and the more conventional thermoset materials, including the SMC compound to be used in General Motors' GM-200 "people carrier", comes in the recycling arena. Whereas the thermoset can only be chopped up or burnt after its life in a car, thermoplastics will melt down into a liquid again. The result, says McKechnie, is that "they are almost fully recyclable."

"Body panels, having done a good job of shaping and protecting the car in their first

life, can then be melted down, but with the material still retaining a large percentage of its original properties. So in its second life it could become, for example, a part of the car's interior trim.

"And when that life is finished, the material could still be used for things like coffee-makers."

McKechnie suggests that there are so many uses for the by then low-grade plastics - for example pipelines - that it would be many years before a problem of disposing of surplus material began to appear. And, pointing to a clear plastic bag containing small, hard grey granules which were once a body panel, he says it is so inert "you could even fill holes in the ground with it."



The Vector: demonstrating the use of thermoplastics for some car body parts

With the Vector demonstrating the use of thermoplastics for some body parts, the onus now passes to the manufacturers to incorporate the material in production models.

The old problem of the length of time taken to lay up a plastic panel has now disappeared, says McKechnie, because the Vector's panels are simply stamped from Noryl sheet. The panels are not self-coloured, but can withstand the baking ovens of a conventional car paint plant without distortion or surface deterioration.

The inner tailgate skin, engine sump and rocker cover are injection moulded from composites produced through a joint venture between GE Plastics and the Pittsburgh-based

PPG group. The tailgate is moulded from Aaloy, a stiff material which is claimed to have saved 5% kg in weight compared with a conventional pressed steel tailgate. Cycle time, even for the tailgate, is less than 60 seconds. Engine parts are moulded from another composite, Azmet.

In the second phase of the Vector's development, the plastic parts will include the bonnet, inner and outer door skins, the complex bulkhead between driving and engine compartments and the roof. Stage three will introduce more structural parts.

The manufacturing flexibility which comes with the use of plastics and the low tooling costs are other important factors in favour of the technolo-

gies being adopted for the cars of the 1990s, according to McKechnie.

However, like the US car makers now seeking government approval for joint research, McKechnie says there is still much work to be done on such questions as how composites behave in crashes, their long-term resistance to vibration and other engineering unknowns or half-knowns.

"We know that if the industry carries on making cars in the current way, tooling and other costs will become so high that we see some car makers going out of business."

"Equally, no manufacturer can afford to put an unsafe car on the road. So much does still need to be done - we need to establish what the limits are."

Diagrams of unseen circuits

PEOPLE who have to test, repair or assess electronic systems with which they are unfamiliar can obtain diagrams of circuit boards using the 1990 system from DCA Technology of the UK.

The 1990 is an automatic tester aimed at the repair and maintenance market where the original diagrams are not always available.

Device interconnections on the board are learnt by the 1990 using a new software package. By examining the interconnections and referring to a library of electronic components, the test system tells the user where to connect probes. It then draws a schematic diagram of what is on the board, indicating the logical function of each device.

WORTH WATCHING

Edited by Geoffrey Charlish

emerging from an oven could be checked for size and shape at two per second, with automatic rejection of the substandard ones.

More complex visual decisions take longer. Powerful software development facilities are built in for designing and testing new inspection routines.

Q-Vision includes a camera, an image processing computer, a supervisory microcomputer, a keypad for production operators and two displays, one for the image and another for programming/operating text. All except the camera is contained in a single rugged cabinet suitable for factory environments.

The system is completely automatic and statistical information is continuously displayed.

Cars protected from pollution

SIEMENS, the West German electronics group, is offering the car manufacturing industry a device which will keep harmful external pollutant gases out of the vehicle in traffic jams or other hazardous places.

The harmful gases reduce the electrical resistance of a sensor, made from tin dioxide and palladium, giving rise to an electrical signal. This is amplified and used to shut the car's input air vents. Occupants will be protected, claims Siemens.

"Equally, no manufacturer can afford to put an unsafe car on the road. So much does still need to be done - we need to establish what the limits are."

Pillows filled with wool

SIMPSON'S Wool, a New Zealand company, is making duvets and pillows out of wool, a material which would normally be regarded as too heavy for fillings.

The company has developed a way of spinning the fibres into small hollow spheres. These are used in pillows to keep the filling soft and uncompressed by entrapping air and preventing the fibres from clumping together with use.

A similar method, involving crimping the fibres, is used for duvets. Good levels of comfort are claimed for the products, which are being supplied in the UK by T & T Marketing of Watford.

A machine that checks products

IMAGE Inspection, a London company which has set out to produce a do-it-yourself machine which allows for product inspection in factories, has launched Q-Vision at less than £3,000.

The company claims that so far manufacturers have had to pay between £20,000 and £50,000 and then either train or employ someone to operate the system. Image Inspection says that with Q-Vision the complexity of implementation is similar to learning to use a word processor.

The machine can carry out inspection jobs that tend to be tedious or boring for human operators. For example, every biscuit

CONTACTS: DCA Technology: UK, 0420 54068; Siemens: UK office, 0632 752323; Image Inspection: London, 748 0666; T & T Marketing: UK, 0923 53214.

Anxious wait for the 'Big Three'

The US Federal Trade Commission is expected to rule soon on whether General Motors, Ford and Chrysler can join forces to research the uses of plastic composites in the motor industry.

The FTC's decision - either to approve the collaboration, or ban it on anti-trust grounds - is awaited by the country's "Big Three" auto makers with considerable anxiety.

General Motors now stands at the brink of a "world first" venture into producing a plastic-bodied passenger vehicle, a van-like "people carrier" code-named GM-200, in the unprecedented volume of up to 225,000 units a year. And GM, Ford and Chrysler, like their rivals in Japan and western Europe, are becoming acutely aware that advanced plastics could revolutionise car manufacture by the late 1990s.

The US producers' anxiety arises from bitter memories of intended collaboration on a crucial area of con-

cern to the industry, exhaust emissions research. Co-operation of any kind was banned by the FTC under America's stringent anti-trust legislation in the early 1970s.

The delays, financial penalties and other disadvantages associated with the consequent duplicated research had the effect of holding back the US producers while a concerted and co-ordinated development programme was being carried out in Japan.

This time, the US manufacturers assert, the FTC should take more account of the internationally competitive climate in which the national industry has to operate. According to a GM spokesman, the necessary research would cost each of the manufacturers a third of the amount it would take to carry it out individually. "That is the way the Japanese

do it."

They believe their chances of approval will be helped by the nature of some of the research they want to undertake - for example, into the environmental consequences of a switch to polymer-based composites by the world's single largest manufacturing industry.

The speed with which plastic composites have been developed and the many forms they take mean that no adequate databases exist yet on the materials, according to senior executives at Ford. Yet the importance of the composites is such that they could displace steel or aluminium completely in car bodies by the turn of the century - little more than two car generations away.

This view marks a change in attitudes from even a couple of years

ago, when it was thought likely that the principal role of composites in car bodies, or at least those built in high volumes, would be to provide easily changeable panels to be attached to steel or aluminium "skeletons". The latter would provide most of the car's structural strength, as is the case with GM's GM-200 van.

However, both Dow Chemical and General Electric's composites subsidiary, GE Plastics, now stress their conviction that lighter, stronger skeletons can be produced from composites at costs competitive with those for metal.

Both companies are already closely involved in composite vehicle development. Dow is one of the suppliers for the GM-200 and both companies have played a key role in BMW's new Z-1 sports car to be launched shortly.

The Z-1's vertical body panels are being supplied by GE Plastics' Dutch-based European subsidiary, while Dow is supplying its bonnet, boot and other horizontal panels.

GM's Pontiac and Chevrolet divisions are preparing to start joint production of the GM-200 in the first quarter of next year at a plant in Tarrytown, New York state.

Production methods will build on those pioneered in the Pontiac Fiero, a mid-engined sports car. At the peak of the car's popularity, Pontiac was building 100,000 Fieros a year. It proved that the Fiero's construction of steel cage and bolted-in composite plastic panels - a thermoset composite called SMC - was viable for medium-size production runs.

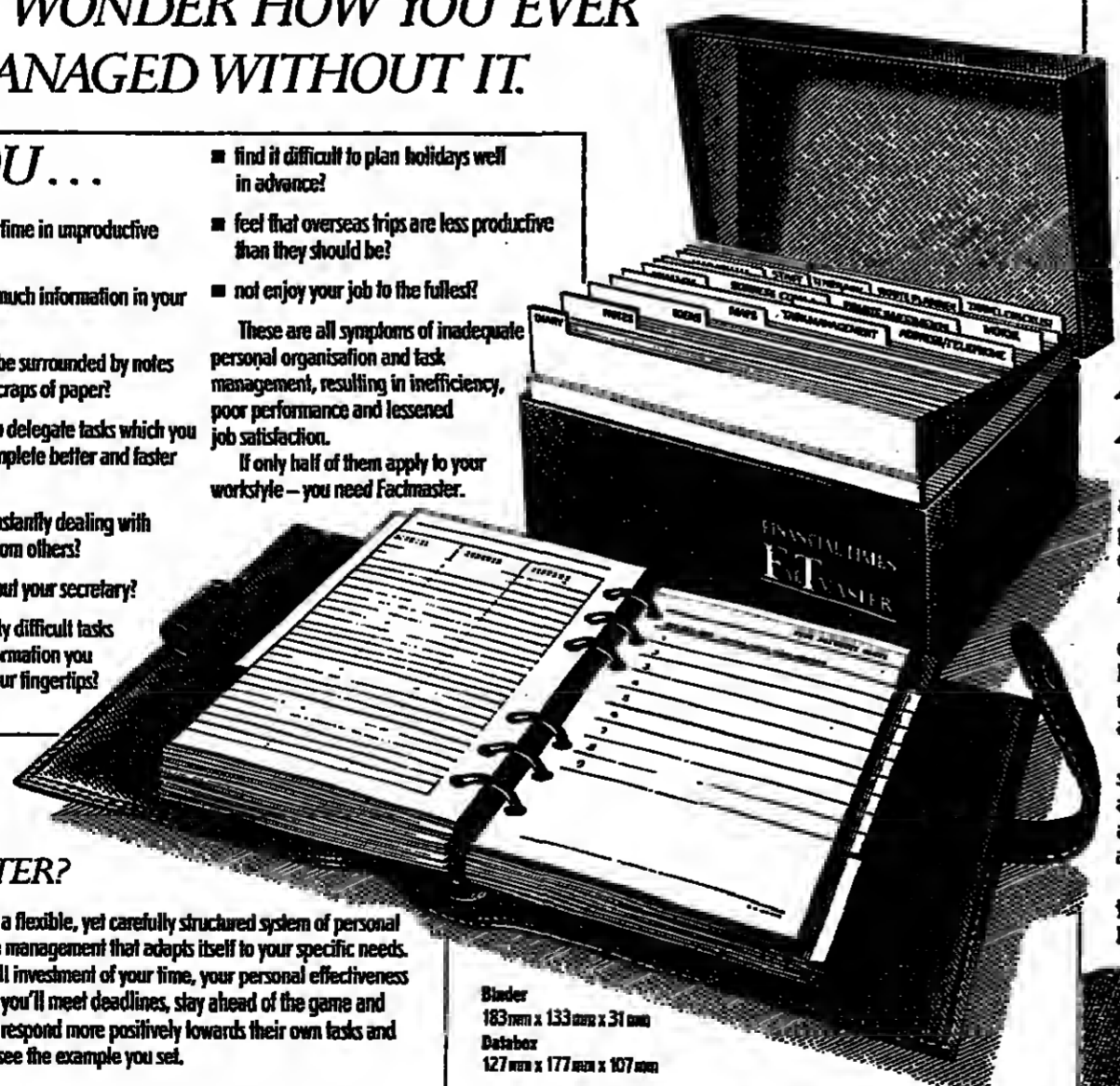
Falling sales led to the Fiero being killed off earlier this year. But the production concept, over which GM encountered no serious problems, has been developed further thanks to relatively low tooling costs.

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FINANCIAL TIMES SURVEY

Although the inquiry into the Piper Alpha disaster means that the year ahead will be a difficult one, the industry is unlikely to be thrown off course, writes Steven Butler, the author of this survey. Companies believe that North Sea oil will be profitable for many years to come.

Confidence returns

A SURVEY of Britain's oil industry six weeks after the Piper Alpha disaster, which claimed 167 lives, cannot fail to examine the implications of this worst accident in the history of the offshore industry. It was the most important single event in the industry this year, and perhaps for many years.

Repercussions from a disaster of such magnitude, with insurance claims likely to exceed £900m, are certain to be felt for a long time. It will raise costs for operations in the North Sea, and obviously lead to more rigorous safety and design standards for manned production platforms.

Yet in truth there is little more one can say about precisely what those repercussions will be than was apparent in the days immediately after the explosion on July 6. The safety record of Occidental Petroleum, operator of the Piper Alpha field, and the entire oil industry has come under intense scrutiny, with incidents of obvious lapses dredged up, sometimes with great relish, for public consumption.

It is right that this should take place and that Occidental and the oil industry should be called upon to defend their

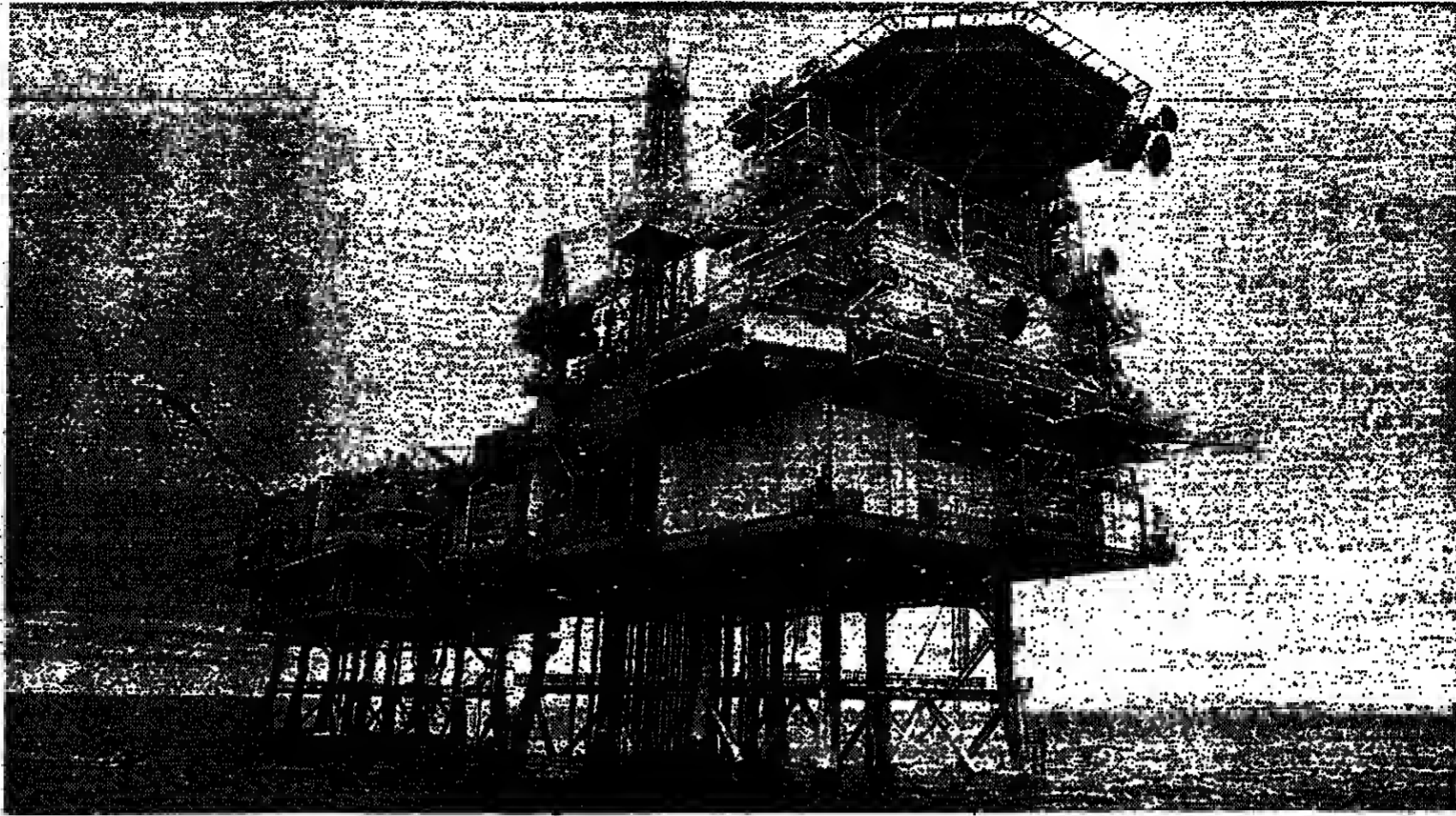
record. It is plainly unacceptable that 167 men should die in an accident that most experts in the industry admit they thought was a remote theoretical possibility.

In the end, however, the recitation of repeated incidents and accidents, which all operators have experienced, can shed little light on the Piper Alpha disaster until understanding of its causes has advanced beyond the initial statement that the explosion appears to have begun in a gas compression unit. This is currently under examination by a technical inquiry led by the Department of Energy.

And the broad safety performance of the industry is unlikely to be properly judged until the entire record is set before the public inquiry in Aberdeen and sifted through with proper technical advice.

One conclusion that emerges from the collection of articles in this survey is that the oil industry is unlikely to be thrown far off-course by what has happened.

A far worse economic crisis, though obviously less tragic in human terms, hit Britain's oil industry with all the ferocity of a severe tropical depression in 1986, when oil prices rapidly collapsed from



The UK Oil Industry

peaks of over \$30 a barrel to less than \$10 a barrel.

In 1986, with the dollar having fallen from its once lofty perch, oil prices are not much better in sterling terms. Yet rather than move to retrench, slash budgets and cancel projects, the oil companies are stepping forward rapidly with excitement and a confidence that the North Sea will prove an excellent place to explore for and produce oil for many years to come.

Since the Piper Alpha explosion, both Amerasia Hess and Enterprise Oil have made big North Sea asset purchases, and the disaster seems to have had little impact on prices.

When British Petroleum bid for Britoil late last year, in what became a £2.5bn takeover, it touched off a virtual scramble among oil companies to build up a position in the North Sea before all the freely available parcels of assets are gone.

BP, Atlantic Richfield, British Gas, Elf Aquitaine, and London & Scottish Marine Oil Company (Lsamo) have all significantly augmented their

positions; while Repsol, the Spanish oil company, walked away disappointed when Enterprise pre-empted an agreed deal with Texas Eastern. Repsol says it has not lost interest, and corporate finance specialists say a number of other deals are currently in the works.

Why this resurgence of interest in the North Sea, when UK production is set to decline irreversibly and at a time of weak oil prices to boot? What has happened cannot simply be explained as renewed confidence that oil prices are set to rise again, because there is no such confidence.

The simple answer is that confidence has blossomed that there is plenty more oil to be found in the North Sea, that the fiscal and political atmosphere will continue to be friendly to oil companies, and that technological processes will make it possible to produce oil ever more cheaply.

Mr Basil Butler, a managing director of BP, recently said BP believed another 80m barrels of oil remained to be discovered in the UK continental shelf, or

roughly half as much again as had already been found. It is a new, more optimistic, estimate that takes into account the recent exploration experience of oil companies.

The impact of Chevron's discovery of oil in the shallow ocean layers of the Alba field are continuing to reverberate through the oil exploration community. The reservoir, currently believed to contain some 300m barrels, with further increases still possible, is virtually invisible to the seismic eye.

It was found by accident, after being drilled through numerous times without realisation that an oil reservoir had been penetrated. Geologists throughout the industry are dusting off old seismic studies for hints that something may have been missed in older, heavily explored licence blocks.

The experience of Enterprise Oil is another telling lesson that hidden riches remain to be found. Enterprise found a 300m barrel reservoir in the Nelson

field, after acquiring licence interests from partners who disagreed with Enterprise's interpretation of seismic data. The block had been under exploration for 30 years.

The search for oil is likely to be assisted by continued improvements in seismic resolution and, more important, by better computer techniques to analyse the mountains of raw data produced by seismic studies. Geologists have also accumulated an ever more complete picture of the layers of earth below the ocean.

Added to the excellent prospects for finding more oil is a perception throughout the industry that realistic planning is possible because of Britain's political stability. In some other regions of the world, oil companies must work with extreme nationalistic or unstable governments.

The Government's interest in oil production is twofold: to maximise tax revenues, and to maximise the broad economic benefits accruing from UK oil production.

These goals have been pursued in a pragmatic fashion, with the Government recognising in the end that oil companies must have the promise of substantial profit to compensate for the high risks of North Sea oil exploration and production.

The fiscal regime has proved highly responsive to fluctuating oil prices, so as not to discourage exploration excessively when cash flow from oil production declines.

The Government's pragmatic approach was well illustrated following the Chancellor's Budget speech in April, when he altered the allowance system for gas fields in the southern gas basin in order to tax fields based on profitability, and thus encourage development of more marginal fields.

The Treasury agreed to alter details of the scheme after oil companies had argued that the terms were set too tight for some producing fields. This sort of response helps to boost confidence among oil companies that they will not be

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Picture (Ashley Ashwood): The Thistle Field, operated by Britoil, subject to a £2.5bn takeover by BP this year	

driven arbitrarily to an impossible position.

Finally, as the articles in this survey make clear, Britain's oil service and supply industries have made a remarkable response to the constraints imposed by lower oil prices and the smaller size of future development projects in the North Sea. In the space of two years, the cost of operating there has plunged by roughly a half. This is partly a response to the forces of supply and demand, with service companies forced to slash prices as the level of work dropped off.

But many service and supply companies have learned how to make a profit at these lower levels by vastly improving management, with an eye to reducing costs at every juncture. Fat has been squeezed out of the industry, and the surviving companies are far more fit to compete, both at home and abroad.

To this has been added a surge of inventiveness as the industry seeks ways to reduce development costs by applying technology. A true industrial ferment is now taking place, which has brought the oil companies together with some of the most famous names in British engineering.

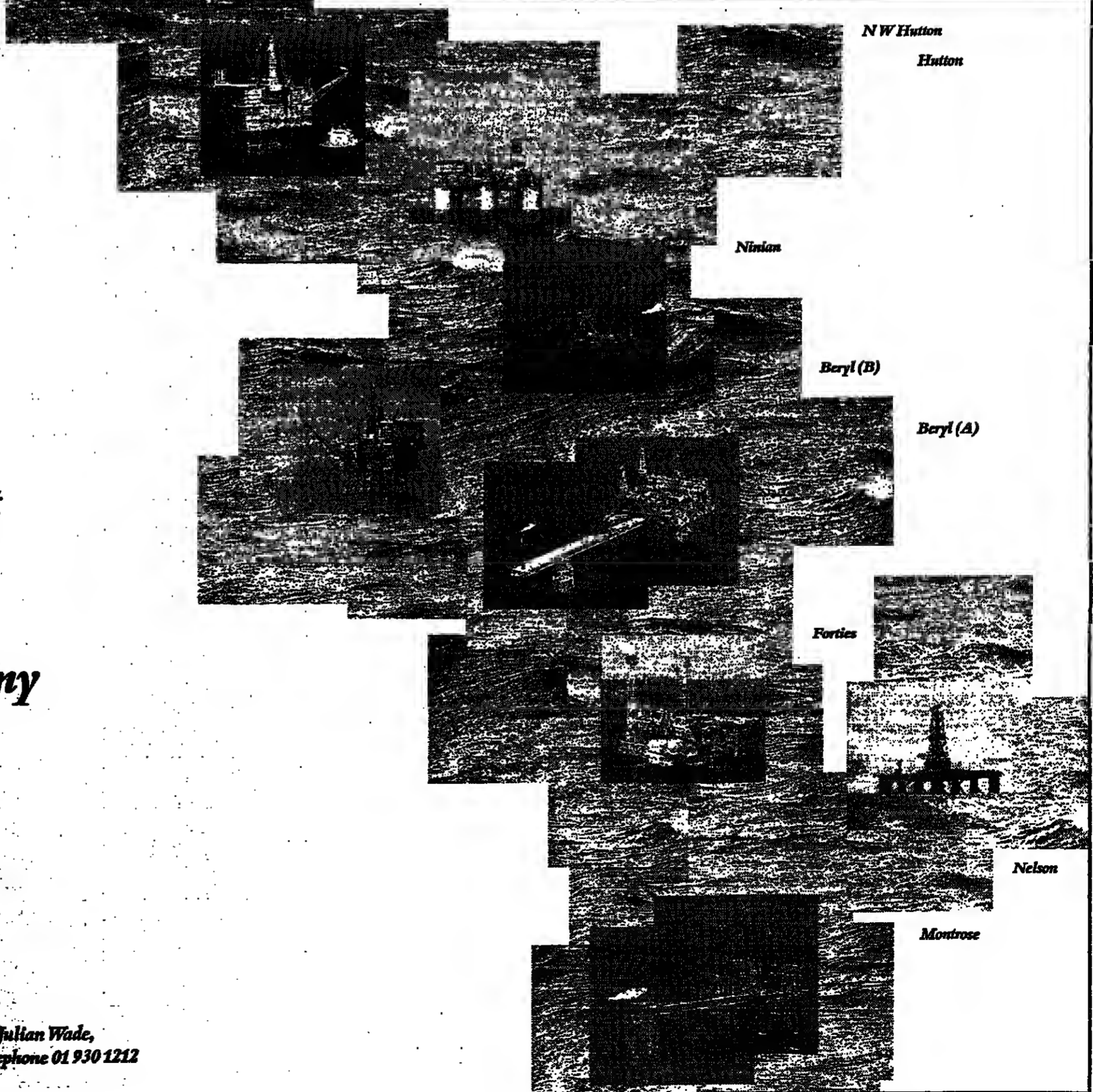
New products are being developed for the extremely harsh conditions of the North Sea, and this has put many British companies on the edge of technology worldwide. This promises to take British companies to new markets, both in the international oil industry and in non-oil related industries where the technology can be applied.

The next year will be a difficult one for the UK oil industry, as the public inquiry into Piper Alpha disaster puts it under intense public scrutiny. Dirty linen will be found, and there will be embarrassment because much of it will be presented without being put into context. The outcome of the inquiry is certain to have a significant effect on the course of the industry. But the momentum of change and innovation now is too great to be seriously diverted.

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UK OIL INDUSTRY 2

The independent sector is dwindling. Does it still have a role?

The case for small players may be difficult to prove

THERE IS something mildly refreshing in the attitude of Presidio Oil, a US oil independent that is building a substantial company by acquiring oil-producing properties which it believes it can operate at a profit.

When Presidio reaches a certain critical mass, say when it is capitalised at \$500m, Mr George Giard, chairman, fully expects to be taken over by a big oil company looking for a significant addition to its oil reserves.

One would be hard pressed to find a similar sentiment among similarly-sized British companies, for whom staying independent appears to border on a moral imperative.

There are of course the usual arguments in favour of the sector - that the addition of a number of smaller players adds diversity, increases competition and leads to the discovery of more oil. The independents also argue that they are good at discouraging the gold-plating habits of their bigger partners in exploration licence blocks.

These arguments, in the end, are difficult to prove, even in the case of Enterprise Oil, which took the bold and risky step of acquiring a 100 per cent interest in a licence block late last year, and proceeded to find 300m barrels of oil where other companies had thought there was none.

Perhaps the oil would have been found eventually, possibly by Shell, which sits over the same structure in a neighbouring licence block.

But it was Enterprise that found the oil, a fact that in the end was less important as an argument in favour of keeping an independent sector than as one in favour of owning Enterprise shares, which have put in a sparkling performance this year. Market capitalisation has risen to roughly £1.6bn, making Enterprise a very substantial company.

With the management's reputation as dealmakers now enhanced by a record of actually finding oil, its shareholders will surely think twice before accepting a stingy offer from a predator, particularly one based on a discounted future cash flow valuation of the company's proven assets. Enterprise has now shown it is capable of enhancing the value of those assets.

Enterprise's shareholder loyalty could well be put to the test in the coming year as a complicated chain of shareholdings unravels following the decision by RTZ, the mining group, to leave the oil exploration and production business.

RTZ sold its own portfolio of assets to Elf Aquitaine, the French oil company, in a \$300m deal, but it continues to hold a 29.5 per cent stake in London & Scottish Marine Oil (LISMO).

RTZ now intends to sell the LISMO stake. Precisely how this sale takes place is likely to determine the structure of the UK independent sector, or indeed whether a significant independent sector survives. It has already dwindled rapidly

in the wake of the takeovers of Britoil, Tricentrol and Acre Oil. Acre, in fact, lasted less than two months after it was floated on the Stock Exchange before it was taken over by British Gas in a \$370m agreed deal.

Predators have put a high value on acquiring North Sea asset portfolios because it is unlikely that similar portfolios can be assembled from scratch, while there is still plenty of oil to be found in the North Sea.

As part of its agreement with Lasmo, RTZ cannot sell its stake as a block until July 1989, unless the Lasmo board approves the sale or a predator wins control of the company. Otherwise, RTZ can sell the stake only in 5 per cent chunks.

In the three months since RTZ became a seller, a buyer for the stake acceptable both to the Lasmo board and RTZ has not materialised. This is probably because almost any buyer of the 29.5 per cent Lasmo stake at current prices would want to control Lasmo, which wants to stay independent.

Mr Chris Greentree, Lasmo chief executive, is in a difficult position, because the highly respected management that he helped assemble is likely to become restless unless the future of the company can be resolved. But preserving independence will be no mean feat.

A key attraction to any predator, of course, is the strategic 25 per cent stake in Enterprise. Acquiring that could be a first step to mounting a successful takeover of Enterprise. This

might suggest that Lasmo should offload the stake to discourage predators, but if it did so, part of the premium in its own share price would vanish and this could make Lasmo more vulnerable to a predator.

The possibility of a merger between Lasmo and Enterprise has often been mooted, and there would be plenty of logic in combining Enterprise's strong position in the North Sea with Lasmo's international holdings. But neither company seems keen.

In the event, Lasmo appears to be playing a waiting game, hoping RTZ will go for immediate cash by selling 5 per cent stakes, rather than wait for a year to realise the full strategic value of its 25 per cent holding.

Lasmo could just scrape through the next 12 months and still be independent. Looking at its exploration and production programme, and its balance sheet, there is no reason why it should not.

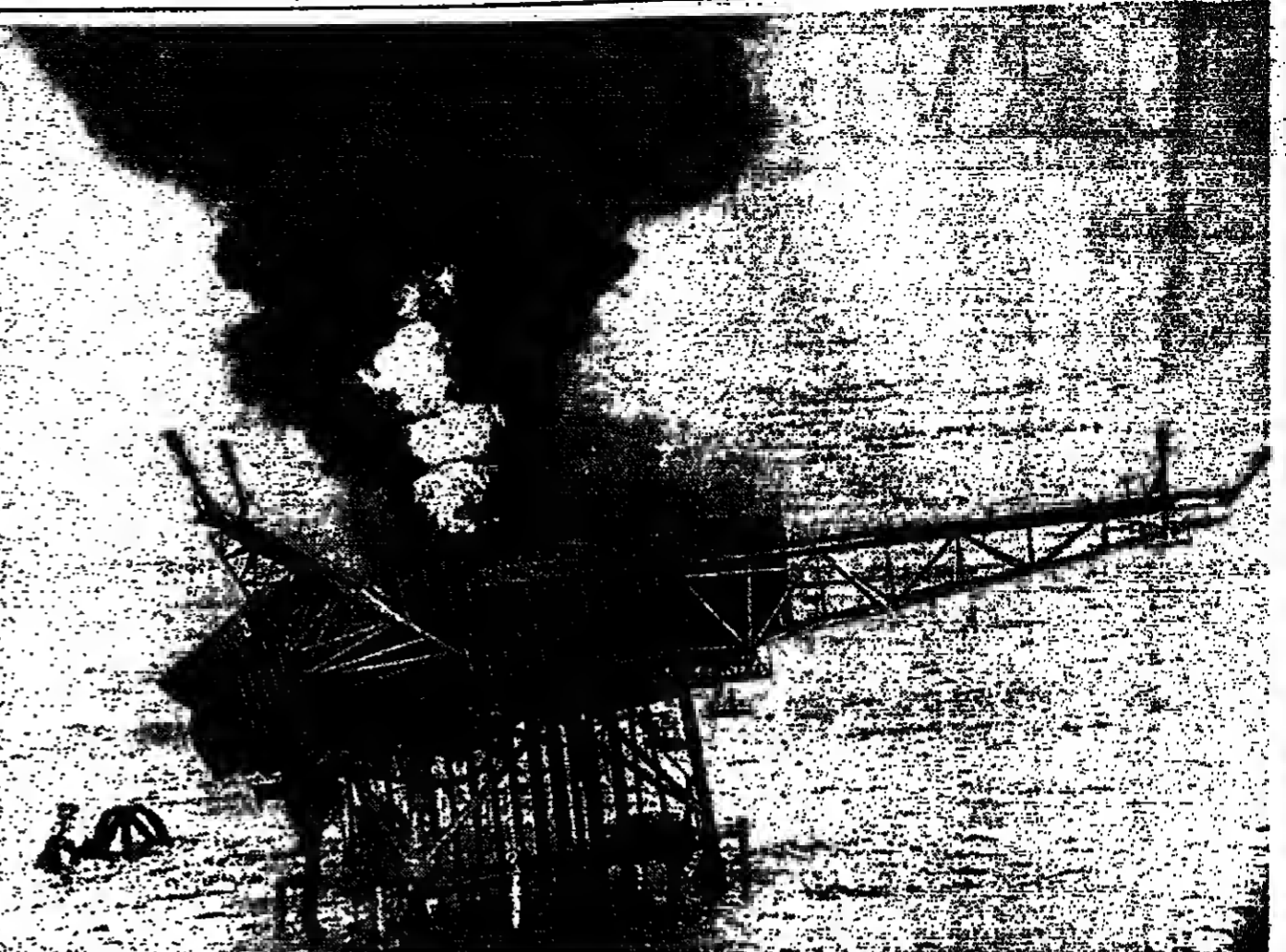
It is often said that stock markets cannot value oil assets properly because time horizons are too short, thus leaving the sector vulnerable to takeovers by big oil companies willing to take a long view.

This argument was particularly in vogue in the case of BP's £2.6bn takeover of Britoil, widely reckoned to be something of a steal. But neither Britoil nor Tricentrol, which fell soon afterwards to Atlantic Richfield of the US for £1.87m, had something that Enterprise or Lasmo evidently have in abundance - happy shareholders.

The bids for Britoil and Tricentrol represented welcome relief for investors that had gone seriously wrong for their shareholders, and the only real question was how to finesse the best price out of them.

Enterprise and Lasmo have delivered to their shareholders, as have, to varying degrees, Premier Consolidated Oil, Clyde Petroleum, Sovereign Oil and Goal Petroleum.

Of course, happy shareholders are not a stout defence against a predator willing to pay over the top for assets. But, à la Presidio Oil, why should they be?



OCCIDENTAL PETROLEUM's Piper Alpha platform exploded in a fiery inferno on July 6, killing 167 oil workers. It was the worst accident in the history of the offshore oil industry. The explosion is thought to have originated in a gas compression module. Technical causes of the accident are being investigated by a Department of Energy team. This will be followed by a public inquiry.

THE SERVICE INDUSTRY

Flexibility assists revival

IN THREE dreadful months of 1988, Mr Ian Wood, chairman of the John Wood Group, saw his company's revenues plummet by a third.

When the oil price collapsed, oil companies operating in the North Sea slashed expenditures on exploration and development to compensate for sharply reduced income. Mr Wood's company, which provides a wide range of services to the offshore oil exploration and production business, took it on the chin.

The experience was not unique. Like other companies in the offshore service industry, Mr Wood cut his staff by 10 per cent, and let one in five of his contract workers go. Yet today many of the same companies that were shaken so severely in 1986 have seen profits restored and are expecting to grow strongly.

Full employment has returned to Aberdeen and companies are finding it difficult to recruit skilled workers. "It is remarkable how much of the industry is intact," says Mr Keith Maier, the Aberdeen head of Investors in Industry (SI), the investment group owned by the clearing banks and the Bank of England.

Although there has been a spate of mergers in the industry, little capacity has been permanently lost. The companies hit hardest were those carrying heavy capital investment on the books, particularly drilling contractors with expensive semi-submersible rigs forced to sit idle.

Mr Maier attributes the survival of so much of the industry to the flexibility of companies and their workforces. Many workers agreed to pay cuts rather than lose jobs.

Nevertheless, a significant number were sacked and scared away by the cyclical nature of the business.

"We've lost a lot of people for good out of the business," says Mr Edward Lottner, managing director of Hunting Oilfield Services, which has a range of engineering and manufacturing capabilities for offshore installations.

Most in the industry now believe that the downturn set in motion by the 1986 price collapse has bottomed out, and growth is on the horizon.

This year the John Wood Group expects profits to approach the record of £4.8m set in 1986, after being more than halved in the intervening two years.

Perhaps the significant, the steep decline in the international oil business did not deter Mr Wood from a planned expansion into the US drilling services industry. The acquisition of a drilling equipment manufacturer in January 1986 was, to say the least, ill-timed.

Mr Wood admits he made all the mistakes, buying the wrong company at the wrong time, at the same time moving into new products, with a new management, in international markets.

Yet after a year and a half of what Mr Wood describes as "crisis management," the US operation is profitable, fattened up by two additional acquisitions last year that Mr Wood is confident about.

The John Wood Group is now the fourth largest drilling service company in the world, although still a long way behind the international giants, Schlumberger, Halliburton and Dresser Atlas.



Mr Ian Wood: US expansion has proved profitable

ence is echoed, with varying degrees of pain, by most other survivors in the sector. Hunting had the bad fortune to have embarked on its international expansion in 1985, building new facilities in Norway and Holland just before the market collapsed.

The full impact of the downturn hit the company in 1987, when annual revenues fell 35 per cent below the 1986 record of £22m, and Hunting was forced to retrench sharply. The new facilities were closed in Norway. The company's original base in Great Yarmouth was shut down. The Houston office was closed and US operations consolidated in Lafayette, Louisiana. The company's Singapore staff was cut sharply.

Now business is running once again at 1986 levels, and the company is looking to expand its specialist connector

business for use in offshore work.

It is the drilling contractors that are still bearing the brunt of the downturn, with rig rates for semi-submersibles, at about \$18,000 a day, barely covering operating costs, when work can be found. Only jack-up rigs, working in the shallower southern gas basin, are in strong demand.

All three of Jebsen Drilling's semi-submersible rigs are sitting idle still, and Mr Jim Murray, finance director, sees the company's future in the production contracting business. A project with Sovereign Oil to develop the Emerald Field is awaiting Department of Trade and Industry approval for the provision of subsidised finance to convert a semi-submersible rig to a production vessel. Without subsidised finance the work would not be feasible in the UK.

UK suppliers now win 87 per cent of North Sea orders, and . . .

Opportunities transcend oil

WHEN EXPLORATION first began in the North Sea, no companies had produced oil in quite so hostile an environment, in water so deep, turbulent and cold.

While this set an expensive challenge to the world's oil industry, it also handed an opportunity to British industry.

The broad success of the response is impossible to gauge, because the complex range of heavy and sophisticated equipment that goes into oil exploration and production produces demand that is felt throughout industry, from steel companies to manufacturers of electronic components, many of whom may be unaware of where their goods will be used.

Government statistics show that British suppliers now win about 87 per cent of orders stemming from North Sea development work, an impressive advance from the early days.

But how much of this results from the free choice of North Sea producers, and how much from the direct and indirect influence of the Offshore Supplies Office, is hard to gauge. No North Sea oil explorer believes it is possible to be successful in future licence awards for North Sea acreage without patronising British industry.

Indeed, support for British

research and development was made a condition of the ninth round of licence awards in 1984. Although pressure from the European Commission led to this explicit condition being withdrawn, the score has really changed.

It is none the less clear that a number of companies have taken advantage of the opportunities.

Ruston Gas Turbines, a GEC subsidiary, has a dominant position in the world market for powering oil pumps, with 80 per cent of sales overseas. Weir Pump's innovative pump designs, aimed at coping with the very high pressure requirements on the North Sea in the early 1970s, have found broad international acceptance in the oil industry.

Even more interesting are the companies that have branched out by finding new uses and markets for technologies developed for use in the North Sea.

Weir's downhole turbine-driven pumps have found a welcome use in some deep water-well applications. The pumps are driven by the fluids that are produced deep below the surface of the earth.

The Balmoral Group has made a success of exporting flotation devices for marine and offshore usage. Osprey Electronics is now selling its underwater cameras, developed mainly for offshore oil

installations, successfully in defence industries.

Few companies however can have been quite so prolific as the Pressure Products Group. Pressure Products (formerly known as Gas Services) has grown out of the invention of a simple valve in 1981 that channels exhaust gases out of a diver's helmet, allowing helium to be extracted on the surface and recycled.

With helium costing £120 per cubic foot, the savings can amount to £4m a year for the average North Sea diver. The equipment has since become standard kit for saturation diving operations around world, in both commercial and military operations.

Pressure Products has since used its expertise to develop other products. One is a bailout system for deep-water diving operations. This is a simple recycling system that would give a diver 15 minutes of gas at 150 feet in an emergency, during which time he could presumably retreat to the safety of a diving bell. Because of high pressure at these depths previously existing emergency equipment would have provided just seconds of air. Diver trials are now going ahead at previously unheard of depths of 2,000 feet.

Other products include cheap, high-pressure oxygen chambers for medical usage, emergency air supply equip-

ment for fire-fighters, and a new 18-inch diameter remote operated submarine vehicle that contains three cameras. The device, which looks more like a toy than a tool, puts off-the-shelf video and still cameras on an axle that rotates 360 degrees vertically inside a plastic viewport to enable remote inspection of underwater structures, ships and boats.

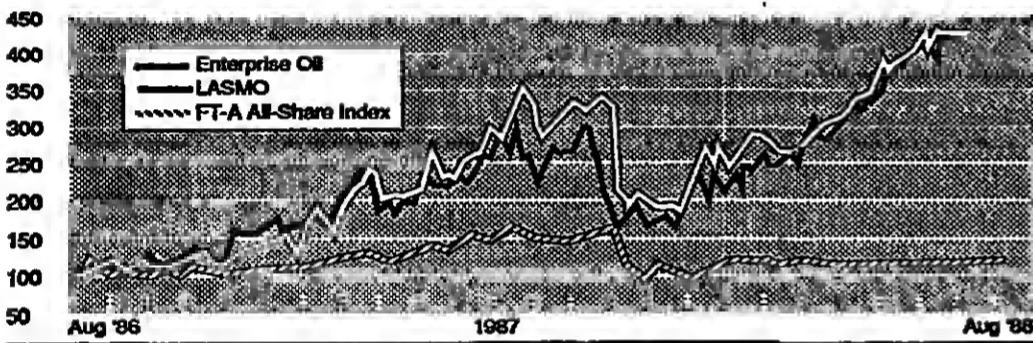
Pressure Products hopes to bring the price down to \$15,000 from a current \$25,000, to enable it to become standard kit for marine inspection use, the sort of equipment that any large commercial vessel, or even a few exotic pleasure craft, just could not do without. The closest competing equipment costs about \$50,000.

Already, Pressure Products has managed to shift its business so that it is only 40 per cent dependent on the oil industry, and it hopes to lower that dependency further to 25 per cent.

The world's oil tools and equipment manufacturing industry is still dominated by foreign, mainly US, companies, and that is unlikely to change.

But as the technological requirements for future North Sea developments become more stringent, owing to the need to use technology to save money on smaller fields, the opportunities for British industry will also grow, both in and out of oil-related markets.

Oil shares beat the index



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UK OIL INDUSTRY 4

Piper Alpha has taken the bloom off Scotland's recovery from recession, reports James Buxton
Efficiency counts as the whirlwind passes

SOME PEOPLE might think of the Piper Alpha tragedy as an event affecting a force of anonymous workers who converged on the platform from all over Britain for their two weeks on and who faded into the background of the UK when they went on leave. But the majority of the 167 men who died came from Scotland, many of them from Aberdeen, and north of the border the disaster is regarded as a tragedy for the whole of Scotland.

all over Scotland. The tragedy came just when Scotland was getting its confidence back after the shock of the 1986 oil industry recession. A spate of announcements about new development contracts promised a big increase in work for the surviving platform construction yards, and they are only the tip of the iceberg: they promise large quantities of sub-contract work and future contracts, and employment in the installation and servicing of offshore operations. None of that work should be affected by Piper Alpha, but

the disaster takes the bloom off the recovery. Only a few months ago the citizens of Aberdeen were breathing sighs of relief that it was once again possible to sell a house without too much difficulty after two years of a deeply depressed market. The oil industry is a major factor that differentiates Scotland from the rest of the UK. Its arrival in the early 1970s helped to soften the impact of the decline in Scottish heavy industry as it accelerated after the 1974 oil crisis. Aberdeen enjoyed a rate of expansion

unknown by almost any other British city. Its population went up by 60,000 to 250,000 as US specialists and vigorous young men from all over Britain moved in to work on the oil platforms. Aberdeen's businessmen and professionals rapidly became accustomed to dealing with companies that were willing to spare no expense in their insistence on getting what they wanted when they wanted it. What made the inrush more substantial was the fact that the new prosperity hit a city that was already reasonably wealthy and experienced. It

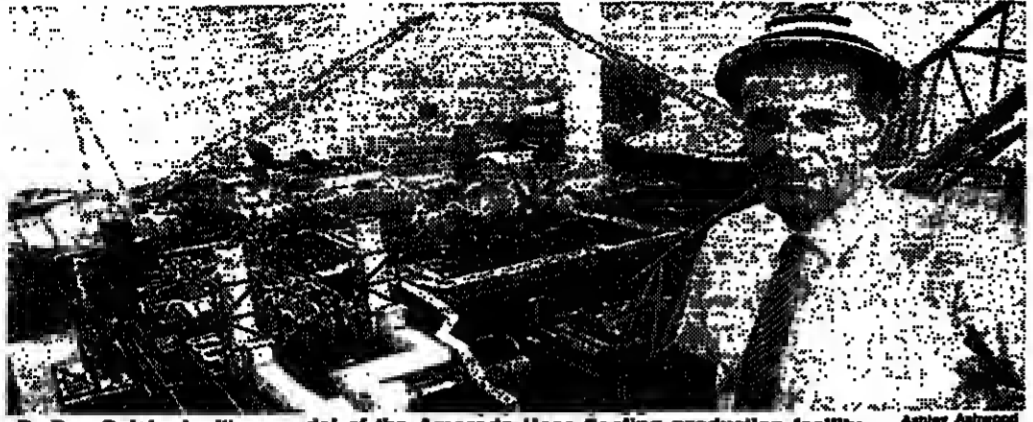
was the centre of a rich agricultural region, as well as an important fishing port. Aberdeen's businessmen and professionals were better placed to cope than those of some other cities might have been. Partly as a consequence of the oil boom, the north-east avoided most of the industrial decay and dereliction that affected other parts of Scotland. Indeed, an impressive spread of new businesses was founded. Had they been close to the central industrial belt of Scotland, they might have helped morale elsewhere. Even so, the Glasgow area

benefited both through the spread of fabrication yards to the Clyde and the offshore work that was won by companies such as Weir Group, Howden and British Steel. Elsewhere the Moray Firth became an important concentration of offshore fabrication and repair work, and at remote Loch Kishorn in Wester Ross the solitude was disturbed by the creation of the Howard Doris concrete fabrication facility. The economy of the Shetland Islands was transformed, for better or for worse, by the construction of the Sullom Voe terminal. A smaller explosion

hit Orkney with the Flotta terminal. The sudden downturn which followed the collapse of oil prices in 1986 not only had a shattering effect on places like Aberdeen, whose experience of oil had been largely benign: it was also the major cause of the fact that, whereas the UK economy grew by more than 3 per cent in 1986, that of Scotland grew by only about 1 per cent that year. So surprise at the fact that Scots voted the opposite way from the English in the 1987 general election was perhaps overdue. For a time the recession dev-

astated confidence in Aberdeen as the oil companies, themselves stunned by what was happening in the oil markets, abruptly shut off spending. Many offshore supply businesses survived only by the most ruthless slimming and efficiency campaigns. Some people who had done well during the fat years quietly departed, sometimes leaving it to the building societies to find a buyer for their houses. But the whirlwind unleashed by the recession caused equally grave devastation elsewhere. The Loch Kishorn fabrication yard closure at the end of 1986 was followed in 1987 by the shutting down of UIE on the Upper Clyde, receivership for Kestrel Marine at Dundee and, earlier this year, the going on to care and maintenance of the Scott Lithgow yard on the

Continued on page 5



Dr Rex Gaisford with a model of the Amerada Hess floating production facility

PROJECT MANAGEMENT

A time-saving Epic

ANY OIL company faced with the prospect of developing a billion barrel field, with oil prices at \$30 a barrel and a strong dollar, would not worry excessively about minor details, such as a cost over-run of a hundred million pounds. But if looking at less than 100m barrels, with oil at \$15 a barrel and a weak dollar, every bit hurts. This is the sort of regime that many oil companies now find themselves operating under, and it has provoked a much more self-conscious approach toward the science, or art, of project management. A project as complex as a North Sea oil development naturally passes through a number of well-established phases, from feasibility and government approval, to detailed engineering and design, procurement, construction, installation, drilling, hook-up and commissioning. Then finally, after spending usually hundreds of millions of pounds over several years, oil or gas comes out of the ground which can be sold in order to begin to pay for these costs and, it is hoped, earn a profit. Obviously, aside from savings that result from clever design of the hardware, the sooner oil can be produced after serious spending begins means more profits at the end of the day, other things being equal. This is a question that the oil industry is now coming to grips with and many projects

under way, or at the planning stage, have in effect tried to collapse the stages so that the final project comes out faster. This is the thinking behind an innovative contract signed earlier this year for Shell/Esso's £420m Sole Pit development in the southern gas basin of the North Sea. Shell, operator of the fields, decided to award the contract on a turnkey basis, dubbed an "Epic" contract, which stands for engineer, procure, instal and commission. In essence, this means that the entire job, following from Shell's conceptual designs, was handed on to Brown & Root/Wimpey Highlands Fabricators in a single £100m contract. Shell will take over again when the development is ready, commissioned and installed to operate. In the meantime Shell will station only about five of its own personnel at HI-Fab to monitor what is going on, as opposed to the usual project staff of 70 or 80. The use of a turnkey approach means that normal gaps between the phases turn into overlaps. Highlands Fabricators has already sent a project team to London to co-ordinate with engineers on the detailed design phase with the aim of coming up with a design that is easy to put together. Unlike the normal project, fabrication is scheduled to start just a few months after detailed engineering begins, rather than waiting until it is 80 per cent complete.

Shell believes that the approach will save a year, but there is also a risk. The company must be sure of its design concept because altering specifications midway would be extremely costly, if possible at all. Responsibility for getting the project right rests far more heavily on the contractor. Although the turnkey concept is obviously attractive, it may not be appropriate for all projects. BP, for example, believes that its Miller field project, where costs are likely to approach £1bn, is too big and complex to hand on in an Epic contract. The Miller project is awaiting finalisation of a gas contract before applying for final government approval. Humphreys & Glasgow, which is providing design, engineering and procurement services for the Miller topsides, is more the less aiming to narrow the gap between engineering and fabrication. The contract for fabrication is to be awarded on a "measured quantities and rates" basis, which would be an agreement on how to determine a final lump sum. This will also allow for the contract to be put out to tender when the engineering is 70 per cent complete, and for work to start at that stage. A lump sum for the job would be fixed six months after contract award, when it is possible to cost the project down to the last bolt. These, of course, are still the



Amerada Hess floating production facility being fitted out in the McNulty Yard, at South Shields

relatively big projects. A good example of how to squeeze down costs in smaller fields is the Amerada Hess development of Ivanhoe/Rob Roy. The basic concept is to use a converted, second-hand (and thus cheap) semi-submersible rig as a floating production facility for two small fields in close proximity. The two reservoirs have total recoverable oil reserves of 89m barrels. The concept for the project was developed in 1985, and put on hold for a year when oil prices collapsed. During this

time another £85m was squeezed out of the cost, which ended up at £350m. Dr Rex Gaisford, project manager, cites other traditional fixed platform projects, designed for a similar capacity of 60,000 barrels a day, that cost twice as much. The vessel, in the Sedco 700-series design, imposes another sort of discipline because of the tightness of the space available. Every bit of equipment brought on board the vessel, currently under conversion at Charlton Leslie Offshore in

South Shields, is weighed as is every bit taken off. This allows constant monitoring of weight to see that this critical factor conforms to planned specifications. The entire topside assembly and nearly all commission can be performed in the yard, while the vessel is moored at Tees-side. Meanwhile, wells and subsea templates are being drilled and installed on site, so that when the vessel is towed out next spring it can be hooked into the system of flexible risers and turned on. The wait for

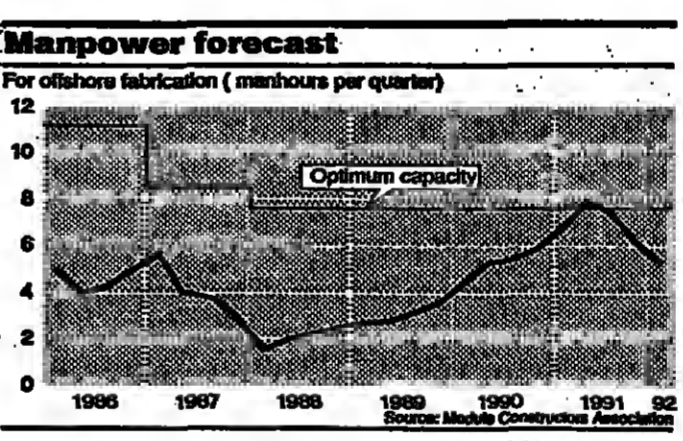
drilling to be completed after installing a platform is entirely eliminated. Production is anticipated to run for 12 years, after which there would be virtually no maintenance of the huge abandonment costs that operators of fixed structures would face. And with a bit more refurbishment the vessel itself could well be ready to see duty at another similar project. The ultimate in cost savings must be Sovereign Oil's plans for the Emerald Field, with reserves of 43m barrels. In this case Jebseps Drilling would

convert one of its own rigs for production purposes, pump the oil on a per barrel fee and hope to continue in business as a production operator, currently suspended, after the field is depleted. Even the oil output has been proscribed to Nestle of Finland for this marginal project, thus eliminating most sources of commercial risk that operators normally face. The economics of this project, however, are so tight that the rig conversion cannot take place without financial support from the government.

The future still looks uncertain for fabrication yards

More work, but more casualties

APRIL WAS a gloomy month at Highlands Fabricators, the offshore fabrication yard to the north-east of Inverness at Nigg Bay. The yard had completed and delivered the jacket it built for the Shell Eider field, the last of the orders from the boom years before the collapse of oil prices in 1986. Hourly employment at the yard had fallen to just 39 from a peak of 5,500 five years earlier. HI-Fab is the prime industrial employer in this otherwise farm-based economy and few people had money in their pockets to support the shops, restaurants and pubs that had sprouted up during earlier boom years. Then suddenly fortune reversed itself. In the space of five weeks, HI-Fab won five orders in succession. By late July, 750 hourly workers had been brought on board again, and the yard was still hiring. HI-Fab of course is one of the more fortunate yards. Fabrication yards, while playing a smaller role in the overall offshore supply and service business than in the past, are still the most visible tip of the industry, where jobs rise and fall erratically according to the unpredictable flow of new development work. At least three yards did not make it through the 1986 downturn. Three others are on "care and maintenance," keeping equipment oiled in hopes of work picking up. Industry capacity has dropped by roughly 25 per cent in two years, and only about 30 per cent of remaining capacity is being used today. Future projections show that work is likely to rise in the coming years but that competition between the yards will continue to be severe, and that more casualties will result. The Module Constructors' Association (MCA) projects that work for the fabrication yards will continue to rise



until the second quarter of 1991 (see illustration). At that time the industry would be operating more or less at optimum capacity. The projection assumes a slippage factor in plans for bringing development projects on stream, based on previous experience. However Mr John Wood, deputy chairman of the MCA and a HI-Fab director, says the report may be based on an excessively conservative assumption about productivity, namely that topsides construction will require 150 manhours per tonne. He says that productivity gains are likely to prove this figure is 25 per cent too high. Instead of reaching full capacity in 1991, the industry is likely to approach only 60 per cent of current capacity by that time, and the balance will probably have to be cut. Fierce competition is likely between yards with capability to take advantage of opportunities provided by the heavy-lift crane barges that individually can handle loads of 10,000 tonnes. Bigger loads can be contemplated for barges working in tandem. Most of the big yards are thought capable of handling this sort of work, with Highlands Fabricators, McDermott Scotland, and Fress Offshore

particularly well suited because of their assembly and deep water loading facilities. The bigger load capacity means that bigger and heavier topside modules for oil production platforms can be built in the yard at a fraction of the cost of building small modules offshore and assembling them offshore, where labour can cost 10 times as much. The bulk of commissioning can also be completed offshore, eliminating the expensive need for housing technicians offshore for months in a floating hotel. The offshore fabrication industry has gone through a radical transformation since its birth in the early 1970s, when the most pressing problem was to get oil into production rapidly. Cost-plus contracts then gave fabricators a virtually open cheque-book, and the industry gained a reputation for consistently coming in with expensive cost over-runs. The advent of lump sum contracts in the late 1970s imposed a discipline to which some of the yards took years to respond. Highlands Fabricators found itself nearly out of business in 1984 when Conoco's tension-leg platform for the Hutton field was taken out of the yard. There was no work because

with the unionised workforce refusing to accede to a 21-point plan to raise productivity, HI-Fab could not bid competitively for a contract. The yard wanted to eliminate a whole range of perks, including free transportation to work within a radius of 50 miles (which cost £2m a year) and subsidised meals. Workers were to shower on their own time and start clocking in at the workplace, instead of taking a long stroll from the yard's front gate on company time. When work dried up in 1984, however, the union finally agreed. Significantly, agreement was reached to work flexibly, with welders and riggers, for example, switching off jobs. HI-Fab commissioned a study of its power consumption and slashed costs. New welding machines were installed that raised productivity three-

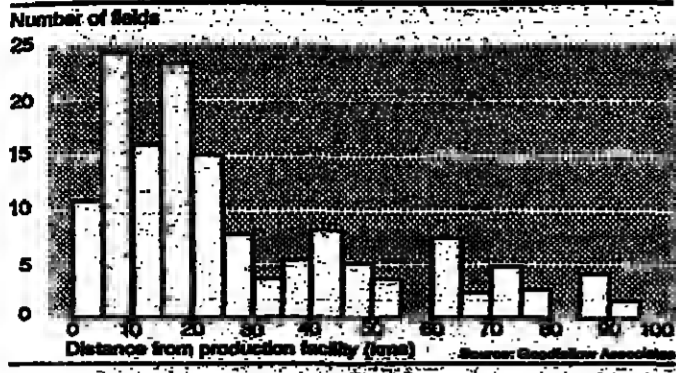
fold and reduced faulty welds to a negligible nine inches in a mile. HI-Fab built a giant covered workshop to enable it to move from its traditional strength of steel jackets to topsides fabrication. Computer terminals were installed throughout the yard, enabling a record to be kept of each weld and each joint, and to allow more sophisticated monitoring and planning for completion of complex jobs. HI-Fab's adaptation to the changing market was, of course, not unique, but rather only what was necessary to stay alive in an industry that has mutated rapidly. The adaptation is just one part of a bigger story of why costs have come down so sharply throughout the North Sea oil industry. And it explains why work is continuing to come forward despite radically lower oil prices.

Ivanhoe and Rob Roy on schedule: First oil Autumn 1989
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UK OIL INDUSTRY 5

Undeveloped North Sea finds



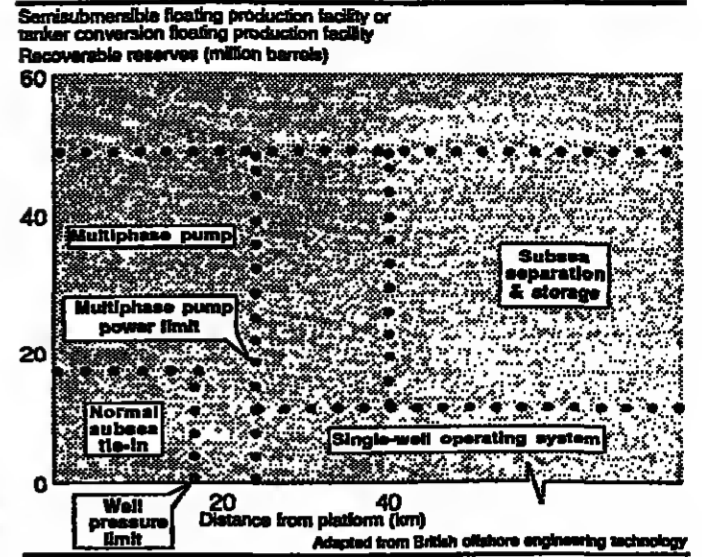
THE FIRST generation of North Sea oil production developments relied on technology that was borrowed and adapted from the Gulf of Mexico. True, the specifications for North Sea production platforms were more stringent because of the deeper and more turbulent water. And the North Sea has been the theatre for a range of interesting innovations, such as Conoco's tension-leg platform at the Hutton field, in which a buoyant platform is fixed in position after being drawn down toward the water by steel legs fixed to the ocean floor. A traditional platform is supported above the water by a steel or concrete structure. Still it is only now, as oil producers face the next phase of development, that engineers are working out a range of totally new production concepts that are forcing scientists to develop new machines. These developments are driven by the changing economics of future North Sea oil production. The big offshore fields, such as the Hutton or the Brent, are almost certainly not to be found again. Medium-sized fields of between 100m and 500m barrels of recoverable oil are becoming much harder to find.

The next North Sea phase will require a technological leap
Small fields set a challenge

Already the list of small fields under 100m barrels is growing. There are currently at least 80, and some estimates put the number at 185. These are likely to be the bread and butter of the oil industry in the next generation. These fields are too small to justify trying for the construction of a big steel jacket with a traditional production platform. Already satellite, subsea development projects have become almost commonplace. In these arrangements, smaller fields close to existing platforms are developed by putting wellhead equipment on the ocean floor and piping the oil to a nearby platform for processing. Advances in extended reach, or deviated, drilling also make it possible to reach remote fields that are several miles from a central platform. In these cases, however, the technology is limited by reservoir pressures which place a restriction of perhaps 10 kilometres on the distance between reservoirs and the main platforms. At greater distances pumps would have to be installed. And it is here that the great challenge is being taken up - to design systems of machines that are reliable enough to be placed in sealed containers on the seabed for months of trouble-free operation. They must be built with enough cleverness so that they can be serviced easily on the seabed, by divers or remote operating vehicles, and then easily brought to the surface for more intense servicing occasionally. Even if the basic machines were available, the task of linking them together and making them work as a system is daunting. The means by which all of this will take place is swiftly coming into better focus as the result of an industry-wide effort. Some of the big oil companies - BP, Shell, Esso and Mobil - have their own

in-house research programmes. Seven oil companies have supported a similar project by Goodfellow Associates, which is building a prototype subsea production system for testing next year. With aid coming from the oil companies and both the Offshore Supplies Office of the Department of Energy and the European Economic Commission, engineering companies are developing individual products to fit into the systems. Two competing and complementary products are the key to the effort - multiphase subsea pumping and subsea separation. The multi-phase pump, currently under development by the Weir Group, is aimed at pumping the mixture of water, oil and gas that comes out of the typical oil well. In a commonly-used centrifugal pump, this is not possible because the action of the pump throws liquids away from the centre, leaving the mechanism to spin uselessly in a pocket of gas. A displacement pump, the sort used in low-volume "nodding donkey" oil wells onshore, could move the mixture, but not in the volumes required. Weir has now successfully tested a prototype of the multi-phase pump in the laboratory. The new pump is based on a rotating screw-type design, and is capable of propelling gas alone. The task ahead for Weir is to come up with an acceptable packaging for use on the seabed. This requires simplification, and Weir hopes to make a solid metal casing that has no seals through which oil could potentially leak into the seawater. The pump could be run on a hydraulic turbine, driven by seawater, or by an electric-powered motor. Weir must also decide what to do about sand which flows out with the oil because scouring of the internal pump parts could give it a short life. The engineering difficulties are well illustrated by Weir's timetable for product development. Even though it now has the basic prototype in operation, it does not expect to test a multiphase pump on the seabed for another two to three years, and is fully aware that even then success for the product is far from certain. An added difficulty for multiphase pumping is that, because water and gas are not separated from the mixture, the

Small field development alternatives



According to the grid, subsea developments become attractive for reservoir sizes below 50m barrels, while above that size a floating production facility, such as that currently being developed by Amerada Hess for the Ivanhoe/Rob Roy fields, becomes economic. Within the smaller reservoir range, the multiphase pump would be competitive at less than 25 kilometres. This is less than the limit which Weir believes may be competitive, and this will obviously be determined when the products are manufactured and available for testing.

When a small field is more than 25km from a platform, BOET believes, subsea separation is the logical alternative because of the relative ease of pumping separated products. But beyond a 40km limit, the case for remote, stand-alone subsea systems becomes attractive. For smaller fields, below 30m barrels, gas would be flared and oil and water put into subsea storage pending visits by a shuttle tanker. Above 30m barrels, and the gas might be reinjected or exported after passing through a gas compressor on a permanently moored semi-submersible rig. This would be relatively cheap to operate and would not require substantial conversion work. Another system yet may be appropriate to very small fields, say below 10m to 15m barrels of oil. In this case, BP is working on a system called SWOPS (single well oil production system), in which a single well head system would be installed, and visited periodically by a floating production vessel. Oil would be drained off for a limited period, and the well would be revisited at a later date after well pressure had naturally built up again. These are the concepts. But to sketch them out so quickly may give a misleading impression that the technology is near to being ready. It is not, and not only because of the development work still needed on the multiphase pump and the separator equipment. Goodfellow Associates says that some of the most critical technology will be the basics, the bits and pieces that hold together the more exotic machines. These include subsea chokes, valves that regulate the flow of oil and take a high degree of battering. Connectors are needed to link up the parts of the system that have no valves that could be a source of leakage. And a critical need that has so far defied the inventiveness of modern science is the underwater power point, a detachable high voltage connector that will not be subject to the corrosive effects of seawater. This is needed because of the impracticality of bringing equipment to the surface for occasional maintenance if permanently installed and sealed power lines must be brought up along with it. There is perhaps no better illustration than this of the difficulties of working under the sea. The next phase of North Sea development work is coming ever more clearly into view. But a technological leap and a burst of inventiveness across the oil industry will still be needed to get there.

After the Scottish whirlwind

Continued from page 4
Lower Clyde. The bloom went off the Shetland economy, and the Moray Firth became known not for the oil platforms it constructed but for the oil rigs lying idle there. But the earliest signs of recovery showed in mid-1987, as exploration companies began to take advantage of the very low rates for chartering oil rigs. Direct oil industry employment in Scotland, the measure used by the Training Commission (which is usually considered very conservative in its definition of wholly oil-related work), bottomed out at 51,530 at the end of 1986, compared with a peak of 65,000 at the end of 1985. By December 1987 it had recovered to 53,500. In Grampian region, centred on Aberdeen, which accounts for more than 80 per cent of such employment, the forecasters earlier this year predicted that employment would regain its 1985 peak in 1990, before declining again into the next century. The slimmest oil supply industry is now more conscious of the need for efficiency, and for export opportunities. But while it is more confident of its ability to cope



Aberdeen: where the new horizon is the year 2000

pete, there is unlikely to be a return to the boom conditions of the pre-1986 era. Such a reversion has given extra impetus to drives to ensure that the north-east of Scotland secures its future for the time when oil revenue declines seriously. Early in 1988, unconnected with the gathering crisis in the oil industry, Mr Ian Wood, chairman and managing director of the John Wood Group, began to put together the working party that last year produced a detailed study called "Aberdeen Beyond 2000", which examines initiatives for improving and broadening the city's economy. Aberdeen Beyond 2000 now has a small secretariat, and shortly before the Piper Alpha disaster it unveiled its scheme for a theme park in the city which would make the oil industry into an attraction for visitors, using simulators, models and film.

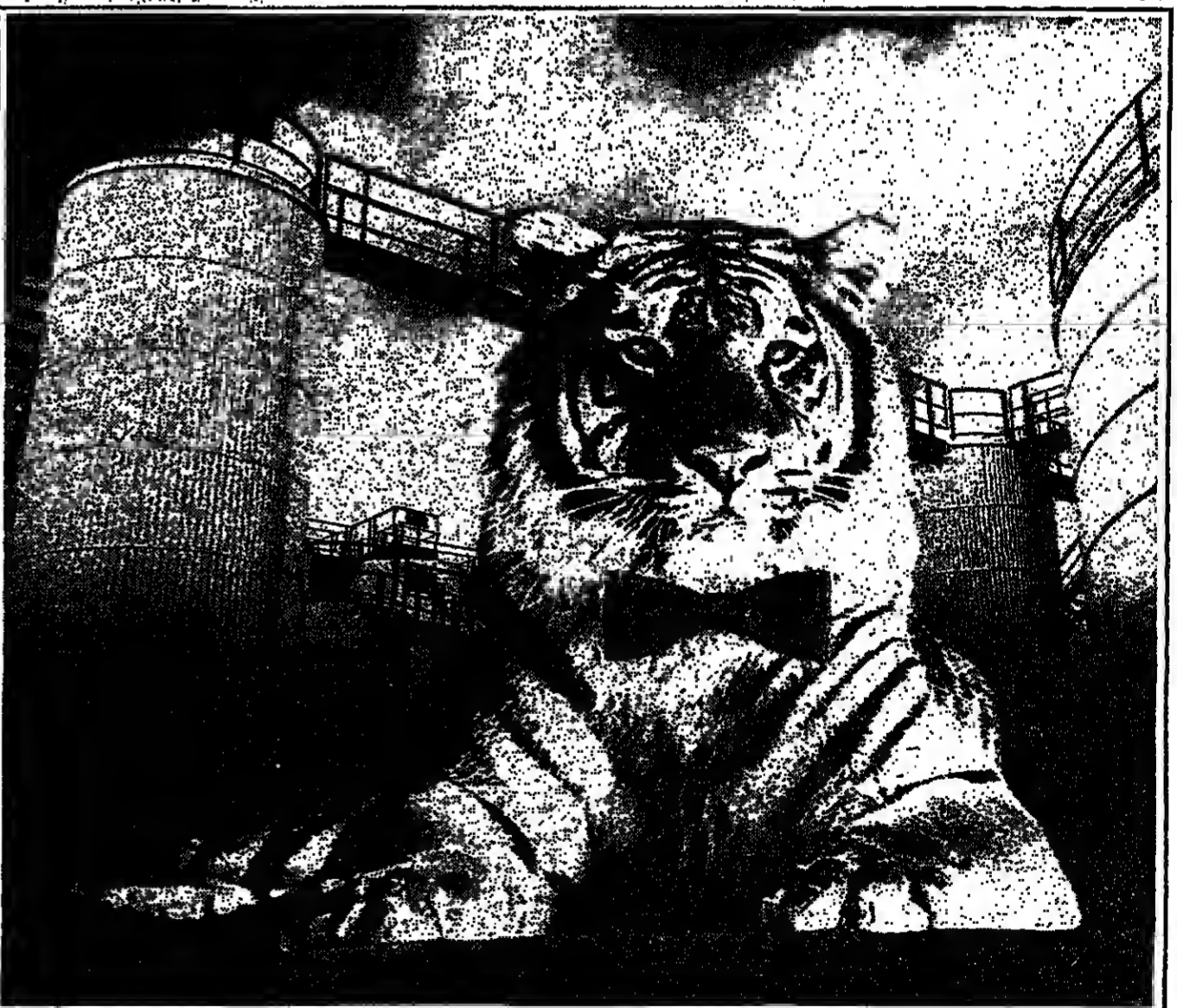
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August, 1988

INTERNATIONAL COMPANIES AND FINANCE

First Boston likely to go private

THE EXPECTED restructuring of First Boston is likely to include the buyout of its publicly-held shares, according to analysis. Reuter reports from New York.

First Boston said in May that it was talking with Credit Suisse about forming a global investment banking company from the activities of First Boston and Financière Cr dit Suisse First Boston.

Since then, the company's stock has been buoyed by growing speculation that the reorganisation will include the purchase of First Boston's stock.

Mr Peter Buchanan, First Boston president and chief executive officer, said: "You can just quote the statement we made in May." Credit Suisse was not available for comment.

An analyst said: "The consensus is that it's going to be major and it's going to take the public out of First Boston." It is thought that First Boston to make an announcement on a restructuring in about a month.

Credit Suisse and First Boston own 60 per cent and 40 per cent respectively of Cr dit Suisse First Boston. Cr dit Suisse First Boston in turn owns 40 per cent of First Boston, with the rest of First Boston owned by employees and the public.

Sources at First Boston disclaim knowledge of the talks and said senior management had been extremely tight-lipped about its plans. The company's reticence has not kept Wall Street from speculating on what a realignment may entail.

Mr Charles Vincent, analyst at Provident National Bank, said: "It looks like First Boston, like many other firms, is going through a period of strategic planning."

It is estimated that taking First Boston private would cost the company more than \$800m, assuming a buyout price of \$45 to \$50 a share. But a simple leveraged buyout is unlikely because of the cost.

First Boston has performed well following defections by investment banking co-heads Mr Bruce Wasserstein and Mr Joseph Perella, but it faces strong competition.

SCEcorp boosts offer for San Diego Gas to \$2.3bn

By Roderick Oram in New York

SCEcorp, parent of Southern California Edison, has increased the pressure on San Diego Gas and Electric, a neighbouring utility, by improving to about \$2.28bn the value of its share swap takeover offer.

Merger of the two companies, which SCEcorp first proposed a month ago, would create the largest electric utility in the country with 78 gigawatts of generating capacity, 4.7m customers and \$6.7bn of annual revenues.

Los Angeles-based SCEcorp reiterated its main condition, however, that San Diego Gas and Electric drop its own bid for Tucson Electric Power, a stock swap worth about \$1.5bn.

SCEcorp's improved offer is the exchange of 1.2 of its

shares, compared with 1.15 originally, for each common share in San Diego Gas and Electric, plus a one-for-one swap of its preferred shares. SCEcorp's shares gained 3% to \$31 1/4 and San Diego's rose 3% to \$34 1/4 in early trading.

The target company, whose board was due to meet later yesterday to consider the offer, declined to comment on the latest SCEcorp move.

SCEcorp estimates a merger would generate some \$350m in cost savings over the next 10 years, which could encourage California utility regulators to approve the deal.

The bids by SCEcorp and San Diego for neighbouring utilities is part of a merger wave in the US electric industry which has triggered by the

Public Utilities Regulatory Power Act in 1978.

It undercut utilities' monopolies by requiring them to buy reasonably priced electricity from independent generators. As a result, smaller utilities have come under increasing competitive pressure.

Shamrock Holdings is no longer seeking a preliminary injunction bearing in Delaware chancery court against Polaroid's recent stock issue and has asked instead for an expedited trial on the matter, according to Shamrock lawyers. Reuter reports from New York.

The lawyers would not comment on the reasons for the move, which was disclosed in a letter to Delaware court last week.

Cambior reopens gold mine in NW Quebec

By Robert Gibbens in Montreal

CAMBIOR, the gold-mining group 30 per cent held by the Quebec Government, has reopened the old Eldrich Flavel mine in the Rouyn-Noranda area of north-western Quebec, and plans to produce 40,000 ounces in 1989.

The reopened mine will make a modest contribution to Cambior's projected production of well over 200,000 oz next year, but Mr Louis Gignac, Cambior's president, said the group's costs of C\$340 (US\$277) per oz should be reduced by increasing reserves at the lower levels.

The mine has been renamed Pierre Beauchemin mine after a Quebec developer.

The company also expects to bring two more small gold mines into production in the same area, and another in the famous Val d'Or area in the near future. Cambior's main source of income is a half share in the Doyon gold mine in Rouyn-Noranda.

The other half is owned by Lac Minerals. Cambior's share of production last year was about 125,000 oz.

Doyon accounts for one quarter of all Quebec's gold production, and the mill is being expanded.

Cambior was formed two

years ago from the privatisation of the operating side of the Quebec Government's Soquem mining and exploration group.

It has raised funds since in Europe and has absorbed the old Sullivan mines. It has just sold an interest in an Ontario gold mine for C\$52m. Cambior also has three gold properties in the US.

In 1987, earnings were C\$21.5m, or 85 cents a share, on revenues of C\$30m. First-half results this year indicate an improvement for all 1988.

Inter-City Gas, a western utility and energy firm controlled 40 per cent by Central Capital, a fast-growing Toronto-based national financial services group, with assets of C\$12.5bn at the end of 1987, is the mystery buyer of a 9.4 per cent equity interest in Ranger Oil.

Inter-City has paid more than C\$50m for just over 7m Ranger shares, saying the deal is for investment purposes.

Ranger has production and exploration interests in the North Sea, South-east Asia and Australasia.

Inter-City's oil and gas assets are located in Western Canada and the US. Revenues this year are expected to be about C\$56m.

Aircraft sales help SAS post 37% profit rise

By Sara Webb in Stockholm

SCANDINAVIAN Airlines System (SAS) yesterday reported a 37 per cent rise in profit for the first six months of 1988 with much of the increase stemming from the sale of aircraft.

Profit before extraordinary items rose to SKr1.05bn (\$162m), with fixed asset sales contributing SKr476m. In the first six months of 1987, similar sales contributed SKr242m to a profit of SKr767m.

Group revenue increased by 12.8 per cent to SKr13bn. SAS said the underlying airline business had performed well and that all business areas with the exception of Vingtor, its package holiday operation, had shown profit increases during the first six months.

Profit before extraordinary items for the airline increased to SKr975m from SKr701m a year ago, helped by increases in domestic and European traffic as well as by a cost-cutting programme.

Full-year figures this year are expected to be "slightly better" than last year. SAS recently agreed to buy into Aerolineas Argentinas of Argentina.

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INTERNATIONAL COMPANIES AND FINANCE

Statoil expects gloomy future

By Karen Fosell in Oslo

THE PORTFOLIO of income-producing activities of Statoil, Norway's troubled state oil company, is not robust enough to counteract low oil and gas prices...

formula governing gas prices has reduced government receipts to less than the cost of transportation to Europe...



Harald Norvik: need to achieve more than a few shillings

Statoil's problems have also stimulated political debate about its role. Indeed, Mr Norvik points to the "political trend towards introducing private shareholders into the company as one way to reduce the increased risks to which the Government is exposed."

ernment's equity holding should be sold," Mr Norvik said. Statoil currently handles the Government's total ownership share in oil and gas projects...

Saga Petroleum falls steeply in interim

By Our Oslo Correspondent

SAGA PETROLEUM, the Norwegian oil independent, suffered a steep fall in first half-year profits to Nkr62m (\$8m) from Nkr25m in the same period last year...

est period from Nkr563m a year earlier. Operating profits slipped to Nkr45m from Nkr62m last year. Conversely, operating revenue increased to Nkr999m from Nkr825m last year.

On August 1, Saga launched a five-year \$95m Eurobond at 10 1/2 per cent priced at 100%. Saga has until September 1 to decide if it will launch a separate convertible Eurobond of between \$100m and \$150m.

The company is gearing up for development of its Nkr11bn Snorre oil and gas field, by which its future prospects are heavily influenced.

Daimler forecasts small rise in car sales

By Andrew Fisher in Frankfurt

DAIMLER-BENZ, the West German motor group with interests in electronics, engines, and aerospace, expects only a slight increase in its domestic car sales this year after a drop at home and a mixed performance abroad in the first seven months.

Worldwide, Daimler said its aim was for a near 2 per cent rise in car sales. Despite price increases caused by the dollar's fall in the past two years and the effect of October's stock market crash, its US sales were stronger than expected.

He said sales in Germany of the 190 had fallen by 15 per cent in the first half, partly as customers waited for the new model and partly because of competition from the BMW 3-series which has benefited from the success of its new larger 7-series and 5-series cars.

The group made no mention of its forward order situation for cars, widely thought in the industry to be down this year. Daimler had not commented on estimates that new orders were 13 per cent lower in the first five months, with the order backlog 30 per cent lower.

Rapid growth at United Paper Mills

By Olli Virtanen in Helsinki

UNITED Paper Mills, the Finnish forest products group whose interests include the Shotton newspaper plant in North Yorkshire, has reported rapid growth in both turnover and profit for the first six months of 1988.

period rose 14 per cent to Fm2.89bn (\$650m) while profit before appropriations and taxes jumped 52 per cent to Fm52m.

UPM produced a total of 640,139 tonnes of paper and paper board during the first six months, an increase of 13 per cent on output.

Sandvik rise helped by strong demand

By Sara Webb in Stockholm

SANDVIK, the Swedish cemented carbide and special steels group, increased profits (after financial items) by 37 per cent to Skr1.25bn (\$193m) in the first six months, helped by strong demand for industrial equipment.

DnC plans rights issue

By Our Oslo Correspondent

DEN NORSKE Creditbank (DnC) said yesterday it planned to launch a one-for-five rights issue. Norway's troubled commercial bank suffered losses on loans and securities of Nkr1.5bn (\$190m) in 1987.

Rabobank advances

Rabobank Nederland, the big Dutch co-operative bank, lifted first-half net profits by 15 per cent to Fl 374m (\$176.4m) from Fl 329m a year earlier as the balance sheet total rose to Fl 155.2bn from Fl 144.3bn, writes Our Financial Staff.

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CITICORP BANKING CORPORATION. U.S. \$50,000,000 Floating Rate Notes due August 20, 1989.

Manfor pulp mill for sale

By Robert Gibbens in Montreal

THE MANITOBA Government is negotiating to sell the Manfor pulp and kraft paper and lumber operations at The Pas, 450 miles north-west of Winnipeg.

lengthy court actions. Ownership reverted to the province in 1973 to prevent closure and save jobs in a remote area. Since then, Manitoba has invested about C\$250m (US\$204m) in the mill.

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INTERNATIONAL CAPITAL MARKETS AND COMPANIES

Strong metal prices boost MIM

By Chris Sherwell in Sydney

STRENGTHENED copper and lead prices contributed significantly to the powerful surge in profits reported yesterday by MIM Holdings, the Brisbane-based multinational resources group.

A "six-to-seven-year drought of low metal prices," MIM said yesterday. "But this is still not a satisfactory return on investment."

MIM's profit from its mining, smelting and refining operations, before tax and exchange gains, nevertheless showed a significant improvement to A\$182m from the previous year's A\$75m. After tax, the figure was A\$97.8m, up from A\$23m.

The group said copper and lead smelters at its principal Mount Isa mine produced at record rates during the year, while production and sales of zinc concentrate were second only to the previous year's record. Silver production was up 15 per cent, and gold made an earnings contribution with the opening of MIM's first Aus-

Venezuela returns with \$100m floater

By Our Euromarkets Staff

VENEZUELA launched its second Eurobond this year, tapping the market via Samuel Montagu with a \$100m five-year floating-rate note paying interest at 1 1/2 points over six-month London interbank offered rates.

Japanese borrowers again flood warrant issue sector

By Our Euromarkets Staff

A FRESH wave of equity warrant bonds for Japanese borrowers hit the international bond market yesterday, depressing prices slightly and calling into question a recent agreement to price securities to reflect the creditworthiness and profile of individual issuers.

International, a producer of liquefied petroleum gas. Neither name is as widely known as Shiseido but both closed at better prices, at 98 1/2 and 98 respectively.

Two other deals of \$50m each were launched. Tokyo Kasei Company, a maker of equipment for aircraft and cars, and Kawashima Textile Manufacturers both four-year bonds with 5 1/2 per cent coupons via Nikko Securities and Nomura Securities respectively.

Amro offshoot buys Chemical Bank Asian unit

By Our Hong Kong Correspondent

PIERSON, Helldrog and PIERSON, the Dutch merchant banker, is to expand its private banking activities in the Far East with the acquisition of Chemical Bank's Asian private banking operations.

Swire aircraft unit 37% ahead

By Michael Murray in Hong Kong

HONGKONG Aircraft Engineering Company (Haco), the aircraft maintenance subsidiary of Swire Pacific, yesterday reported a 37 per cent increase in attributable profits to HK\$118.5m (US\$13m) for the six months ended June 30.

Turnover rose to HK\$893.1m from a previous HK\$489.2m, and pre-tax profits climbed to HK\$136.7m from HK\$100.2m. The dividend is going up from 25.9 cents share to 33.3 cents.

Other Cathay Pacific aircraft. During the first half, refurbishment work was also undertaken for British Airways, one of Haco's biggest customers, including cabin refurbishments on four Tristar and the fitting out of one new Boeing 747.

Equiticorp wins approval for major reorganisation

By Our Financial Staff

EQUITICORP International is to press ahead with its wide-ranging reorganisation following regulatory approval from the UK, Hong Kong, Australian and New Zealand authorities.

Singapore bank group shows profits growth

By Our Financial Staff

OVERSEAS Union Bank, the Singapore banking group, reports a near 13 per cent increase in group profits to S\$31m (US\$15m), after tax and diminution in value of assets, in the six months to June 1988 compared with a year earlier.

At the bank alone, after-tax earnings climbed 21 per cent to S\$22.1m. Group depreciation rose to S\$6.2m from S\$4.5m, while for the bank depreciation edged up to S\$5.5m from S\$4m.

Shortly after the mandate was awarded, Venezuela announced that in an effort to protect dwindling foreign exchange reserves, it would delay interest payments due on some domestic bonds and said that for the first time in about five years it would ask commercial bank creditors for fresh funds.

Publishers placing

Publishers Equipment of the US announced a private placement of 800,000 common shares with Koenig & Bauer of West Germany valued at \$4.4m.

Bond for Von Roll

VON ROLL, the Swiss industrial group, is to raise SFR60m through the Zurich capital market. The 4 1/2 per cent, eight-year bond is priced at 100 1/2.

Reliance Petrochemicals launches issue

RELIANCE Petrochemicals, an offshoot of Reliance Industries, has launched a Rs5bn convertible debenture issue, the largest yet issued in India.

Reliance Petrochemicals launches issue

Reliance Industries is one of India's fastest growing companies. A Rs3.4bn convertible bond issued by the company in 1986 was more than three times subscribed.

FT GUIDE TO WORLD CURRENCIES

The table below gives the latest available rates of exchange (rounded) against four key currencies on Monday 22 August 1988. In some cases the rate is nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are used.

Table with columns for Country, £/Stg, US\$, D-Mark, Yen (x100). Lists various countries and their exchange rates.

Abbreviations: (a) Buying rate; (b) Banknote rate; (c) Commercial rate; (d) Commercial rate; (e) Essential exports; (f) Essential rate; (g) Export; (h) Non-commercial rate; (i) Business rate; (j) Currency rate; (k) Market rate; (l) Official rate; (m) Preferential rate; (n) Convertible rate; (o) Parallel rate; (p) Selling rate; (q) Tourist rate.

Some data supplied by Bank of America, European Central Bank, London Trading Centre, Enquiries: 01 634 4360/3. Monday 22 August 1988. Treatment derived by 15.22%

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UK COMPANY NEWS

Woodchester vaults to I£7.65m

By Clare Pearson

ACQUISITIONS helped Woodchester Investments, Irish-based finance and leasing subsidiary of British & Commonwealth Holdings, increase pre-tax profits to I£7.65m (€6.38m) in the six months to the end of June.

£66.78m (€24.92m). Tax took £2m (€702,000). The interim dividend is raised to 75p, which compares with 60p for the six months to end-September last year.

Rockwood surges to £1.1m in first half

ROCKWOOD HOLDINGS, the rapidly expanding USM-quoted distribution and related services group, yesterday reported more than trebled interim profits and a 63 per cent jump in earnings per share.

Manufacturing side lifts Alida to £2.35m midterm

By Andrew Hill

ALIDA HOLDINGS, packaging manufacturer and distributor, increased pre-tax profits by 16 per cent in the six months to June 30, despite a disappointing performance from the distribution side.

New Throgmorton plan will raise £22m

By Nikki Tait

NEW THROGMORTON Trust, the split level investment trust specialising in recovery situations, is gearing up via an innovative issue of zero coupon debenture stock and by the drawdown of a 10-year fixed loan facility.

coupon stocks currently trade. New Throgmorton's zero coupon stock, which is underwritten by BZW, raises around £7.5m. It was placed yesterday at £32.977 per £100 nominal of stock.

J Fisher up 10% at £1.6m

By Peter Pearce

JAMES FISHER & Sons, shipowner, port operator, insurance broker, ship manager and stevedore, increased pre-tax profits by 10 per cent from £1.42m to £1.56m in the first half of 1988.

The tax charge was slightly up at £551,000. An extraordinary credit of £4,85m (debit £4,500), related to the disposal in May of three freehold port interests in Gravesend and Sittingbourne, Kent, and Ellesmere Port, Cheshire.

Dee sees no need for board replacements

By Nikki Tait

DEE CORPORATION, the UK food retailer which earlier this year rebuffed a £2bn bid from Barker & Dolson, says that it sees no immediate need for boardroom replacements.

Nevertheless, in Dee's annual report, Mr Ken Mack, chairman, says that "the simplified structure of the group does not require immediate board replacements".

Wace expands with £1.94m purchase

By Andrew Hill

Wace Group, the pre-press services group, has bought north-west Essex, a chairman, said that existing contracted income which took the group through the second half of the year and beyond should enable it to continue the considerably improved performance.

Scottish Eastern asset rise

By Andrew Hill

With the benefit of an upturn in world stock markets since the October crash, Scottish Eastern Investment Trust has lifted its net asset value by 10.7 per cent to 167.2p over the six months ended July 31 1988.

The group's shipping interests performed well and benefited from the improvement in the shipping market which started towards the end of last year. However, fierce competition in the port industry restrained further growth in the group's ports, which failed to meet expectations.

Bristol Water raising £12m via issues

By Andrew Hill

BRISTOL WATERWORKS Company yesterday announced an issue of ordinary stock to raise up to £6m.

convertible into ordinary stock at a rate of £100 nominal stock for every 500 preference shares for every 1989 and 1994.

Directors on March

Two directors of March, the racing cars and engineering group which joined the Unlisted Securities Market in April last year, have resigned following a recent major shake-up in management.

Pleasurama

Pleasurama's £63m bid for Hard Rock International yesterday went unconditional as to acceptances. Shareholders speaking for 91.38 per cent of Hard Rock's equity have accepted the offer.

ARAB BANKING

The Financial Times proposes to publish a Survey on the above on 17th October 1988. For a full editorial synopsis and advertisement details, please contact: Laurette Lecomte-Peacock

COMPANY NEWS IN BRIEF

ECONOMIC FORESTRY Group has acquired Nutscene, a private company engaged in the manufacture and distribution of garden products, for a total of £600,000 cash.

on results for the two years to December 31 1990. GNOME PHOTOGRAPHIC is to change its name to Noble Raredon, subject to a resolution of the forthcoming AGM.

development in the US through its Detroit-based subsidiary Pressac Inc, which has opened a new purpose-built warehouse in Huntsville, Alabama.

HONG KONG AS A FINANCIAL CENTRE

The Financial Times proposes to publish this survey on: 26th OCTOBER 1988. For a full editorial synopsis and advertisement details, please contact: PETER HIGHLAND on 01-248 8000 ext 3595

SHARE STAKES

The following changes in share stakes were announced recently: ASBOTT MEAD Vickers: London Uberior (LAS Group) Nominees, part of London & Scottish Insurance, holds 706,800 shares (5.3 per cent).

COMMERCIAL UNION: GA Duncan Pty holds 400,000 and Ollies Investment 29.1m shares. Total holding of 29.5m represents 7 per cent of capital.

Holding of Amalgamated Financial Investments reduced from 1m to 800,000 shares (4.78 per cent).

Leveraged Capital Holdings NV. The Quarterly Report as of 30th June 1988 has been published and may be obtained from: Pierson, Holding & Pierson NV.

Tokyo Pacific Holdings N.V. The Quarterly Report as of 30th June 1988 has been published and may be obtained from: Pierson, Holding & Pierson NV.

National Westminster Bank PLC. The Quarterly Report as of 30th June 1988 has been published and may be obtained from: Pierson, Holding & Pierson NV.

GNOME PHOTOGRAPHIC is to change its name to Noble Raredon, subject to a resolution of the forthcoming AGM.

DRESDNER BANK A.G. LONDON BRANCH CHANGE OF ADDRESS. OUR NEW ADDRESS IS DRESDNER BANK HOUSE 125 WOOD STREET LONDON EC2V 7AQ

NOTICE TO WARRANTHOLDERS OF TOWA REAL ESTATE DEVELOPMENT CO., LTD. USS40,000,000 3% per cent. Guaranteed Bonds with Warrants

THE NEW THROGMORTON TRUST (1983) PLC. Placing by Barclays de Zoete Wedd Limited of £22,500,000 Nominal of Zero Coupon Debenture Stock 1998 at £32.977 per £100 nominal payable in full on acceptance.

CURRENCIES, MONEY AND CAPITAL MARKETS

FOREIGN EXCHANGES

Dollar up despite intervention

FURTHER CO-ORDINATED intervention to sell the dollar by the US Federal Reserve and European central banks, had only limited impact yesterday.

European currencies were generally weak, losing ground against the dollar, and also declining in terms of the Japanese yen.

The dollar remained very strong against the D-Mark, finishing at DML9190, compared with DML8920 on Friday, and near the recent 19-month peak of DML9260.

The US currency also rose to Y134.05 from Y133.45, to SF11.615 from SF11.5915, and to FF6.5060 from FF6.4150.

According to the Bank of England, the dollar's exchange rate index rose to 100.4 from 99.8.

The weak D-Mark dragged down other members of the European Monetary System against the dollar, but kept trading within the EMS itself very quiet.

A movement against the D-Mark was seen in the Far East, where there was speculative buying of the dollar and yen, against the German currency. The dollar closed at the day's high of DML9125 in Tokyo.

The Bank of Japan did not intervene to stem the dollar's rise, but trading in Europe began slowly as dealers feared dollar sales by central banks.

IN NEW YORK

Table with columns: Aug 22, Last, Previous, Close. Rows for 3-month, 6-month, 12-month.

STERLING INDEX

Table with columns: Aug 22, Last, Previous, Close. Rows for 3.00, 3.50, 4.00, 4.50, 5.00.

CURRENCY RATES

Table with columns: Aug 22, Last, Previous, Close. Rows for Sterling, Swiss Franc, etc.

CURRENCY MOVEMENTS

Table with columns: Aug 22, Last, Previous, Close. Rows for Sterling, Swiss Franc, etc.

OTHER CURRENCIES

Table with columns: Aug 22, Last, Previous, Close. Rows for Argentina, Brazil, etc.

MONEY MARKETS

UK rates higher

INTEREST RATES were firmer in London yesterday as the pound lost ground against the dollar. The key three-month interbank rate rose to 11.11% p.c. from 11.14% p.c. The one year rate was also quoted at 11.11% p.c., underlining the market's uncertainty about longer term interest rate trends.

Dealers suggested that most investors are marking time, ahead of Thursday's release of

UK sterling bank base lending rate

UK trade figures for July. Overnight interbank money opened at 9.75% p.c. and moved up to 10% p.c. before slipping back to 9.4% p.c. However late demand pushed rates up to 12 p.c.

The Bank of England forecast a shortage of around £250m, with factors affecting the market including repayment of any late assistance and bills maturing in official hands, together with a take up of Treasury bills draining £247m, and Exchange transactions accounting for a further £440m. These were partly offset by a fall in the note circulation of £408m, and banks' balances brought forward £15m above target.

The forecast was revised to a shortage of around £350m, and the Bank gave assistance in the morning of £218m through outright purchases of £50m of eligible bank bills in band 3 and £182m in band 4, all at 10% p.c. Further help was given in the afternoon of £280m, and this comprised purchases of £45m of eligible bank bills in band 3 and £235m in band 4, all at 10% p.c. Late help came to £10m, making a total of £327m.

Interest rates in Frankfurt were slightly firmer as traders awaited the terms of today's sale and repurchase tender. Commercial banks' deposits with the central bank dropped sharply at the end of last week, coinciding with end of month corporate tax payments, and this tended to push rates higher.

Dealers were also concerned by the D-Mark's continued weakness against the dollar, and some suggested that this week's meeting of the Bundesbank central council - the first after the summer break - could herald a further rise in key interest rates. The response rate could be increased to 4.5 p.c., dealers argued, but this would still be less than the average rate for call money over the past month, which has hovered just below the emergency London financing rate of 5 p.c.

FINANCIAL FUTURES

Prices slip on base rate fears

THREE-MONTH sterling deposits fell to an all-time low in Liffe trading yesterday, as uncertainty about UK trade figures for July increased upward pressure on cash rates. However, the Bank of England gave no signal on base rates through its day-to-day intervention in the money market.

Dealers suggested that yesterday's lack of any signal was not designed as an advance

indication that the trade data may not be as bad as expected, but was more of a tactical move. The Bank of England may be keen to keep its powder dry until after the figures are released.

The September sterling contract opened at 85.55 and fell to a low of 85.32 before finishing at 85.35, down from 85.51 on Friday. Trading volume remained on the quiet side,

with activity still curtailed by the absence of many traders and institutional investors for annual holidays.

US Treasury bonds were also weaker. Traders are expecting further evidence this week that the US economy is expanding fast enough to revive inflationary fears. Consequently, the September price slipped to 84.94 from 84.31 at the opening, and 85.02 on Friday.

STERLING'S exchange rate index fell 0.5 to finish at the day's low of 76.2.

FT GUIDE TO WORLD CURRENCIES, Page 38.

Estimated volume total, Calls 229 Puts 0. Previous day's open: Calls 229 Puts 30722.

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EUROPEAN OPTIONS EXCHANGE

Large table with columns: Series, Mar 88, Vol, Last, May 88, Vol, Last, Jun 88, Vol, Last. Rows include various currency options like DOLLAR, EURO, etc.

BASE LENDING RATES

Table with columns: Bank Name, Rate, Bank Name, Rate. Lists various banks and their base lending rates.

Company Notices

LEUMI INTERNATIONAL INVESTMENTS N.V. notice regarding a guaranteed floating rate bond. Includes details about the bond's features and contact information.

Art Galleries

MIKUNI'S CREDIT RATINGS advertisement. Promotes financial information service on Japanese corporate issuers. Includes contact details for Mikuni & Co. Ltd.

Clubs

Notice regarding club membership and related matters.

Legal Notices

NOTICE OF APPOINTMENT OF JOINT ADMINISTRATIVE RECEIVERS. Legal notice regarding the administration of an estate or company.

FT LONDON INTERBANK FIXING

Table showing interbank fixing rates for various currencies and terms.

MONEY RATES

Table showing money rates for Treasury Bills and Bonds.

LONDON MONEY RATES

Table showing London money rates for various currencies.

Company Notices

GRINDLAYS CAPEL-CURE INTERNATIONAL FUND notice. Details about the fund's investment strategy and contact information.

Legal Notices

Additional legal notices and administrative information.

Handwritten note: "معلومات" (Information)

FT UNIT TRUST INFORMATION SERVICE

Main table listing various unit trusts with columns for Name, Price, and Change. Includes sub-sections for 'INSURANCES' and 'OTHER UK UNIT TRUSTS'.

INSURANCES

Detailed table of insurance unit trusts, including names like 'Black Horse Life Ass. Co Ltd', 'Commercial Union Group', and 'Friends' Provident', with associated prices and changes.

OTHER UK UNIT TRUSTS

Table listing other UK unit trusts such as 'Bathurst Unit Trust', 'Charities Official Trust', and 'Edinburgh Fund Mgmt PLC'.

Continued on next page

FT UNIT TRUST INFORMATION SERVICE

Main table containing unit trust information, organized into columns for various fund categories and providers. Includes sections for 'MANAGEMENT SERVICES', 'OFFSHORE AND OVERSEAS', and 'UK LISTED'.

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FT UNIT TRUST INFORMATION SERVICE

Main table of FT Unit Trust Information Service, listing various unit trusts with columns for name, price, and other financial metrics.

LONDON SHARE SERVICE

Main table of London Share Service, listing various shares and funds with columns for name, price, and other financial metrics.

Continued on next page

Money Market Trust Funds

Table listing Money Market Trust Funds with columns for name, price, and other financial metrics.

Money Market Bank Accounts

Table listing Money Market Bank Accounts with columns for name, price, and other financial metrics.

UNIT TRUST NOTES: Detailed text providing information and disclaimers regarding unit trusts.

LONDON SHARE SERVICE

AMERICANS - Contd

Table listing American companies such as IBM, Microsoft, and Intel, with columns for stock price, change, and volume.

CANADIANS

Table listing Canadian companies such as Alcan, Inco, and Northern Telecom, with columns for stock price, change, and volume.

BANKS, HP & LEASING

Table listing financial institutions and leasing companies, including Citicorp, Citicredit, and various leasing firms.

BUILDING, TIMBER, ROADS

Table listing companies in the building, timber, and roads sectors, such as Balfour Beatty and Bovis Lend Lease.

ELECTRICALS

Table listing electrical engineering and equipment companies, including Balfour Beatty and Bovis Lend Lease.

ENGINEERING - Contd

Table listing engineering and technology companies, such as British Aerospace and British Telecom.

INDUSTRIALS (Misc.) - Contd

Table listing various industrial companies, including British Airways and British Petroleum.

INDUSTRIALS (Misc.) - Contd

Table listing various industrial companies, including British Airways and British Petroleum.

CHEMICALS, PLASTICS

Table listing chemical and plastic companies, such as ICI and British Petroleum.

FOOD, GROCERIES, ETC

Table listing food and grocery companies, including Unilever and Nestle.

DRAPERY AND STORES

Table listing retail and drapery companies, such as Marks & Spencer and Debenhams.

BEERS, WINES & SPIRITS

Table listing beverage companies, including British Beer and Diageo.

BUILDING, TIMBER, ROADS

Table listing companies in the building, timber, and roads sectors, such as Balfour Beatty and Bovis Lend Lease.

ENGINEERING

Table listing engineering and technology companies, such as British Aerospace and British Telecom.

HOTELS AND CATERERS

Table listing hotel and catering companies, including Whitbread and Whitbread PLC.

INDUSTRIALS (Misc.)

Table listing various industrial companies, including British Airways and British Petroleum.

INSURANCES

Table listing insurance companies, such as Prudential and Royal Indemnity.

LEISURE

Table listing leisure and entertainment companies, including British Airways and British Petroleum.

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LONDON SHARE SERVICE

Handwritten note in Arabic script: "مكتبة ابن بطوطة"

LEISURE - Contd. Table listing various leisure-related stocks and their prices.

PAPER, PRINTING, ADVERTISING - Contd. Table listing stocks in the paper, printing, and advertising sectors.

TEXTILES - Contd. Table listing various textile-related stocks.

TRUSTS, FINANCE, LAND - Contd. Table listing stocks in the trusts, finance, and land sectors.

OIL AND GAS - Contd. Table listing various oil and gas related stocks.

MINES - Contd. Table listing various mining-related stocks.

MOTORS, AIRCRAFT TRADES. Table listing stocks in the motor and aircraft trades sectors.

PROPERTY. Table listing various property-related stocks.

TOBACCO. Table listing tobacco-related stocks.

TRUSTS, FINANCE, LAND. Table listing various trusts, finance, and land stocks.

OVERSEAS TRADERS. Table listing stocks of overseas trading companies.

MISCELLANEOUS. Table listing various miscellaneous stocks.

Commercial Vehicles. Table listing stocks in the commercial vehicles sector.

COMPONENTS. Table listing various component stocks.

FINANCE, LAND, ETC. Table listing various finance, land, and other stocks.

PLANTATIONS. Table listing stocks in the plantations sector.

TEAS. Table listing tea-related stocks.

THIRD MARKET. Table listing stocks traded on the third market.

NEWSPAPERS, PUBLISHERS. Table listing stocks in the newspaper and publishing sectors.

SHIPPING. Table listing various shipping-related stocks.

SHOES AND LEATHER. Table listing stocks in the shoes and leather sectors.

OIL AND GAS. Table listing various oil and gas stocks.

FINANCE. Table listing various finance-related stocks.

REGIONAL & IRISH STOCKS. Table listing regional and Irish stocks.

PAPER, PRINTING, ADVERTISING. Table listing various paper, printing, and advertising stocks.

SOUTH AFRICANS. Table listing various South African stocks.

TEXTILES. Table listing various textile-related stocks.

TRUSTS, FINANCE, LAND. Table listing various trusts, finance, and land stocks.

OVERSEAS TRADERS. Table listing various overseas trading stocks.

TRADITIONAL OPTIONS. Table listing traditional options with 3-month call rates.

SHIPPING. Table listing various shipping-related stocks.

SHOES AND LEATHER. Table listing various shoes and leather stocks.

TEXTILES. Table listing various textile-related stocks.

OIL AND GAS. Table listing various oil and gas stocks.

FINANCE. Table listing various finance-related stocks.

REGIONAL & IRISH STOCKS. Table listing regional and Irish stocks.

Stock Exchange listing instructions and notes regarding share prices, dividends, and market conditions.

Regional & Irish Stocks section providing specific data and notes for these markets.

FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

Table with columns: EQUITY GROUPS & SUB-SECTIONS, Monday August 22 1988, Index No., Day's Change, etc. Lists various industry sectors like CAPITAL GOODS, BUILDING MATERIALS, etc.

Table with columns: FIXED INTEREST, AVERAGE GROSS REDEMPTION YIELDS, PRICE INDICES. Lists yields for various interest-bearing instruments.

Opening Index 1840.6; 10 am 1836.5; 11 am 1835.6; Noon 1835.9; 1 pm 1835.4; 2 pm 1835.0; 3 pm 1830.7; 4 pm 1830.7

RISES AND FALLS YESTERDAY

Table showing Rises and Falls for various categories: British Funds, Corporations, etc.

LONDON RECENT ISSUES

Table listing recent issues with columns: Issue, Amount, Date, etc.

FIXED INTEREST STOCKS

Table listing fixed interest stocks with columns: Issue, Amount, Date, etc.

RIGHTS OFFERS

Table listing rights offers with columns: Issue, Amount, Date, etc.

TRADITIONAL OPTIONS

First Dealings, Last Dealings, Late Declarations, For settlement, For rate indications see end of London Share Service

LONDON TRADED OPTIONS

Large table showing LONDON TRADED OPTIONS with columns: Option, Calls, Puts, etc. Includes sub-sections for CALLS and PUTS.

HONG KONG AS A FINANCIAL CENTRE. The Financial Times proposes to publish a Survey on the above on 26TH OCTOBER 1988. For a full editorial synopsis and advertisement details, please contact: PETER HIGHLAND on 01-248-8000 ext 3595 or write to him at: Bracken House, 10 Cannon Street London EC4P 4BY.

SUMITOMO METAL MINING CO., LTD. U.S.\$300,000,000 4 per cent. Guaranteed Bonds Due 1992 with Warrants. to subscribe for shares of common stock of Sumitomo Metal Mining Co., Ltd. The Sumitomo Bank, Limited. Daiwa Europe Limited. Sumitomo Finance International, Yamaichi International (Europe) Limited, Sumitomo Trust International Limited, Bank of Tokyo Capital Markets Group, Barclays de Zoete Wedd Limited, James Capel & Co., Credit Suisse First Boston Limited, Goldman Sachs International Corp., The Izumi Securities Co., Ltd., LICB International Limited, Meiko Europe Limited, J. P. Morgan Securities Asia Ltd., Nippon Credit International Limited, Norinchukin International Limited, J. Henry Schroder Wagg & Co. Limited, Universal (U.K.) Limited.

GRANVILLE SPONSORED SECURITIES. Table with columns: High Low, Company, Price, Change, etc. Lists various securities like 236 185 Ast. Brit. Ind. Delivery, etc.

AMSTERDAM-ROTTERDAM BANK N.V. Warrants attached to US\$ 100,000,000. 3 1/2% Bonds due 1996. Due to the decision to issue to holders of ordinary shares in the above mentioned company a bonus of Dfl. 0.50 in ordinary shares from the Shares Premium Reserve with simultaneous addition to any reserve of a corresponding amount out of that portion of the profit over 1988 which is intended for distribution, the warrants exercise price will be reduced from Dfl. 116.60 to Dfl. 115.60 as from August 12, 1988. The Trustee: AMSTERDAMSCH TRUSTEES KANTOOR B.V. August 12, 1988 N.Z. Voorburgwal 326-328 Amsterdam (The Netherlands)

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LONDON STOCK EXCHANGE

Equity volume at lowest this year

In what dealers described as probably the most thinly traded market since the beginning of the year, equities and bonds gave ground on a mixture of lack of business, growing nervousness about forthcoming economic data from both sides of the Atlantic, and worries about possible further increases in UK interest rates.

Turnover is likely to have been the lowest since "Big Bang" in October 1986. Indicative of the overall lack of enthusiasm in the market was a snapshot of the FT-SE 100 stocks on the SEAIQ system at 11 am. This showed that only four of the UK's top 100 shares had enjoyed a trade in excess of 1m shares.

Equity markets opened with a slight rise across the board, slightly disturbed by the weaker trends on Street last Friday and Tokyo overnight - and thereafter continued to drift easier as market makers lowered prices in vain attempts to trigger a positive trend.

Little or no business was forthcoming and share prices drifted further during the morning before staging a half-up marginally to close a net 12.0 off at 1,832.3.

after touching 1095 earlier. However, turnover of 314,000 "A" shares was well below recent levels. Marks & Spencer drifted down to 167p without seeing much selling pressure.

Defence stocks in focus

Reports that Plessey has been appointed lead contractor for a \$500m Nato electronic identification system helped the shares stand up in a weak market yesterday, but left unresolved some uncertainty over the group's next move.

County NatWest WoodMac, noting that the electrical and defence group announced a \$200m - \$300m Eurocredit line, suggest that Plessey may make further acquisitions soon, perhaps increasing its borrowings to do so.

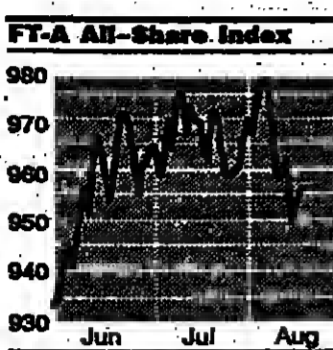
However, there were also rumours that the Nato contract, which would involve fitting identification devices to all UK Royal Air Force and Navy ships and aircraft, may be the first step in winning a similar contract for US forces.

Also attracting interest was Ferranti, which held a meeting with City analysts in Edinburgh last Friday. The analysts came away from the meeting in a relatively positive mood, although the stress had been put on explaining the group's high-technology rather than financial prospects.

However, at Phillips & Drew, Mr Stephen Parker continues to recommend switching out of Ferranti, which is at the top of its trading range and at a 10 per cent premium to the market, and into Plessey, at a 10 per cent discount and very attractive in yield terms.

Jaguar uneasy Normally a beneficiary of a stronger US dollar, Jaguar drifted down in a market feeling uneasy over both the job losses announced at the weekend and the interim trading statement, due on Friday. The planned elimination of 1,200 jobs, to be effected by natural wastage, results from the group, along with other European luxury car manufacturers, being hit by the recession in the US market.

Market forecasts of the half-year profits now fall within a band of £28m to £36m. Home Govett is opting for £29.7m and BZW a slightly more optimistic £34m, compared with last year's actual of £25.7m. Business was fairly light yesterday, only 514,000 shares traded, and the close was 4 easier at 272p.



US sales are below target, running slightly under last year's levels, and the group is extremely unlikely to achieve its previously-stated sales target of \$3,000 million worldwide next year. Sector researchers have regularly downgraded profits estimates, but rumours of stake building - both the Golden Share and 15 per cent shareholding limit, expire at the end of 1990 - have given some support to the shares.

extension of the deadline on its \$72 per share offer until 4pm Californian time tomorrow caused business in BAT shares to mark time. Only 382,000 shares changed hands, but the price drifted back with the general market downturn to close 2 off at 425p. Betmans International, on the other hand, edged forward to 440p amid speculation of an impending development.

Illiquid brewers

The Brewery sector failed to take much inspiration from the start of the new licensing hours. Most stocks hardly traded and even a host of broker's circulars could do little to encourage investors. Scottish & Newcastle ran into mild selling pressure as one leading dealer was said to be trying to knock the shares. The excitement was limited, however, and the shares ended just 7 worse at 359p. Lack of news from Mr John Elliot's Elders Ltd, rumoured to have been adding to its stake recently prior to a bid, was blamed for the fall.

Whitebread "B" shares jumped 80 to 650p amid speculation that dealers were short of stock. The stock was demoted to gamma status three months ago and is thinly traded, fuelled by rumours that the Whitebread voting structure will be changed. The "A" shares were down 3 to 289p.

Bass fell 7 to 781p, despite last week's bullish reaction to news of its sale of its Horizon Travel subsidiary. Grand Metropolitan moved back 5 to 509p.

BAT Industries' terse statement about the US Farmers group merger negotiations and

NEW HIGHS AND LOWS FOR 1988

- NEW HIGHS (50) AMERIGAS (C) CPC Intl, Quaker Oats, Reg. NY Corp, CANADIAN (C) Deere, TRISTAR (C) Ford, etc.

business. The picture was much the same elsewhere in financials. Both Abbey Life (320p) and Legal & General (322p) turned off as speculative buyers took the day off.

At 530p, Standard Chartered continued to lie under the shadow of the rights issue despite its non-appearance in the interim report.

Property shares took on a distinctly dull appearance, clouded by press suggestions that the recent boom in London office rents may be approaching a peak. Worries about a possible further rise in interest rates also dampened investors' enthusiasm.

International stocks were distinctly subdued. Fisons fell 4 to 249p as the new mid-paid shares started trading at a 40p premium in what dealers said was a good debut.

Reed International fell 4 to 440p, falling to impure an uninterested market with news that its Butterworth's subsidiary had made an Australian purchase.

JS Pathology continued to be adversely affected by last week's profit warning and the shares fell 28 to 335p.

In Oils, BP "new" shares, trading both ex dividend and with the second cash call income reported in the price, closed at 153p. The other oil majors ended with small losses also, and Bursmah (521p) and Ultramar (267p) gave back a few pence of recent gains.

A speculative feature was Sovereign Oil & Gas, up 2 at 160p on rumours that Neste OY of Finland had taken a stake. Bank shares shed a few pence as interest rate uncertainty continued to unsettle the sector. Barclays (412p), Midland (413p) and NatWest (548p) closed a shade off and TSB, a penny down at 107p, also saw substantial put option

few stocks to back the trend. A tightly held market, the shares challenged the high point of the year with a rise of 8 to 512p on expectations of good first half results, due September 7, and talk of buoyant Lada sales.

Evans Halshaw (346p) also stayed close to its 1988 peak awaiting today's interim figures. BZW forecasts profits of £3.6m against £2.4m last time. Lex Service, however, eased to 137p despite County NatWest WoodMac advice that the shares are "cheap at this level".

A quiet agency sector was enlivened only by activity in AGE Research, where a single buyer of 500,000 shares sent the stock 8 better to 186p. Dealers said the buy order was issued on Friday, but only filled yesterday. They were uncertain of

the buyer's identity. Advertising company Geers Cross rose 7 to 59p, after 80p. Turnover was described by dealers as heavy and there were unfocused takeover rumours lurking.

Two contrasting features cropped up in the usually lacklustre Shipping sector. Walter Runciman reverted to near pre-bid levels, closing 18 down at 313p following lapsing of the Telfos offer while Telfos rebounded 5 to 175p. Turnbull Scott, a small market at the best of times, gained 7 further to the year's highest of 177p.

Smith New Court, the quoted securities house, went lower despite weekend comment on the Rothschild stake to end 3 easier at 177p. Paranga Mining & Exploration slipped back after the inter-

FINANCIAL TIMES STOCK INDICES

Table with columns for Aug 22, Aug 19, Aug 18, Aug 17, Aug 16, Year Ago, High, Low, and 1988. Rows include Government Secs, Fixed Interest, Ordinary, Gold Mines, Ord. Div. Yield, PVE Ratio, SEAIQ, Equity Turnover, Equity Bargains, Shares Traded, and Ordinary Share Index.

TRADING VOLUME IN MAJOR STOCKS

Table with columns for Stock, Volume, Daily Price, and Daily Change. Lists various stocks like ASDA Group, Allied-Lennox, Anglo-Continental, etc.

WHAT'S HAPPENING AT No. 1 THREADNEEDLE STREET?

During the next few weeks Eagle Star will be transferring its staff from the existing head office, across the road from The Old Lady, to brand new custom built headquarters at 60 St. Mary Axe, on the corner of Bevis Marks.

APPOINTMENTS

Toy marketing director at Kenner Parker Tonka

KENNER PARKER TONKA, one of the world's largest toy companies, has appointed Mr Nick Wright as UK marketing director. He joined from Tonka as marketing manager, girl's toys, in January. He replaces Mr Nigel Young who will be

Mr Walker Woyda has been appointed a director of the PICKWICK GROUP. He will be responsible for the group's video operations. He joined Pickwick in July 1987. Before that he was managing director of the ATV record and video companies, and was the first person to launch pre-recorded audio cassettes in the UK through Phillips record group in 1965.

Mr John F. Small has been made a non-executive director of W.A. HOLDINGS. He was group managing director of United Glass.

Mr LAMONT & PARTNERS, member of the Financial Intermediaries Managers and Brokers Regulatory Association (FIMBRA), has appointed Mr Michael Marchant, formerly a director of P.S. Johnson, to its main board of directors. He will be responsible for the development of the financial services division. Mr Richard Oliver has also been appointed to the main board. He has responsibilities in the investment management division.

THE DUNEDIN PROPERTY GROUP, a wholly-owned subsidiary of the LHS Association of Scotland, will expand from its Scottish base with the opening of a London

Restructuring at London Underground

LONDON UNDERGROUND has appointed four managers to head each of its operations divisions as part of a major restructuring programme. They are Mr Nick Agnew for the Central and Bakerloo, Mr Bob Bryson for the Northern and Victoria, Mr Spencer McKinnis for the District and Jubilee, and Mr Mike Scott for the Metropolitan and Circle lines.

office in Mayfair on September 5. Following the operation will be Mr Ian Wiseman, who will be responsible for Dunsdin's English activities along with joint venture transactions.

Mr Charles Morland has become managing director of RIGGS A.P. BANK, London, a subsidiary of The Riggs National Bank of Washington D.C. He succeeds Mr Brian Rowan who has retired, but who continues on the board for his retirement year as an executive director with special duties.

Mr George Steele has been appointed managing director of NBS, Weybridge, Surrey, a credit card and associated equipment supplier. He is succeeded at national sales

Mr Malcolm Hill has been appointed senior manager - operations and administration, at the London branch of the AMSTERDAM-ROTTERDAM BANK.



IBERIA, Spain's international airline, has appointed Mr Wenceslao Corral (above) as general manager to head operations in the UK and Ireland, based in London. He will also take charge of the airline's business in Iceland. He was commercial vice president for Africa, the Middle East and Far East.

manager, card products division, by Mr Ian Brown.

Mr George Stonler, WEDGWOOD GROUP company secretary and director of industrial relations, has been appointed chairman of Precision Studios. He is a member of the board of Waterford Wedgwood Holdings.

Mr Malcolm Hill has been appointed senior manager - operations and administration, at the London branch of the AMSTERDAM-ROTTERDAM BANK.

Mr Richard English, who has recently retired as British

Eagle Star Investment Managers Ltd advertisement. Includes address: 60 St. Mary Axe, London EC3A 8BA. Contact info: Tel: 01-929 1111 Fax: 01-626 1266 Telex: 914962. Logo: Eagle Star. Slogan: Facing the future with confidence.

COMMODITIES AND AGRICULTURE

S African ferro-chrome rationed

By Jim Jones in Johannesburg

SOUTH AFRICA'S ferro-chrome producers are struggling, not against sanctions but against soaring world demand which has forced them to ration supplies to some customers.



long-term sales contracts. Steelmakers who have relied on spot purchases are being rationed. They are mainly in the US, but some Johannesburg metals traders, rationing has led to allegations South Africa is applying counter-sanctions.

Ferro-chrome producer prices have been increased each quarter this year from just more than US\$0 cents a lb of contained chromium in January to 70 cents now.

the year's start to about \$550 for contract sales and about \$650 in the spot market.

Mr Pieter du Plooy, who markets Samancor's ferro-chrome, said about half his company's US customers were affected by the rationing but that European and Japanese steelmakers buying spot material have also been rationed.

Hunt ruling pleases Peru

By Our Foreign Staff

THE Peruvian Government yesterday treated the \$134m US court ruling against the Hunt brothers of Texas for manipulating the silver market as a major vindication.

Saudi Arabia cuts outlay on wheat output incentives

By Finn Barre in Riyadh

SAUDI ARABIA has begun to cut outlay on its wheat production incentives.

The combined effect of the wheat subsidies amounted to almost 15 times the world wheat price. The actual government wheat-purchase price was \$3,500 a tonne.

Peru as the world's major silver exporter was anxious also demonstrate that the market could not be manipulated no matter how powerful and well-known the speculators might be.

Gold struck in volume in Israel

By Laura Blumenfeld in Jerusalem

GOLD HAS been struck in Israel in potentially commercial volume, attracting mining interest from abroad.

Israeli government geologists found big concentrations of gold in surface samples of stream sediments in an area covering several square kilometers of the southern Arava region.

Norway pessimistic of its oil prospects

By Karen Fosell in Stavanger

THE NORWEGIAN Petroleum Directorate yesterday issued by far its most pessimistic prognosis on Norway's oil-producing prospects.

The directorate is watching over the country's oil sector and adviser to the Ministry of Oil and Energy. Its Prospective Analysis report, traditionally issued by Norwegian energy authorities for planning purposes, paints a gloomy picture.

Norway began producing from the prolific Ekofisk field in 1971. Output has since climbed to more than 1m barrels of oil a day and about 28bn cubic metres of gas annually.

Ugandan initiative aims to aid small farmers

By Mrs Mary Nabule

MRS MARY NABULE is 63 years old and has a two-acre banana plot in southern Uganda. She, like most Ugandan peasants, does not hold the land-title needed to obtain a commercial loan to develop her plot.

Catherine Bond on a scheme which may be a good social service but bad banking

she became a beneficiary of a revolutionary scheme by the Uganda Commercial Bank. The scheme, first of its kind in Africa, grants character loans to small farmers, without security.

co-operatives to procure loans. Dr Mwine says response to the scheme has been overwhelming. However, cash flow problems are holding up new loans and in many areas farmers are having to wait. Government prices for crops are low.

However, last October her prospects brightened. She became a beneficiary of a revolutionary scheme by the Uganda Commercial Bank. The scheme, first of its kind in Africa, grants character loans to small farmers, without security.

The aim of the UCB's Rural Farmers Scheme is to boost farm output by lending modest amounts as agricultural input to the peasant farmers who form the backbone of Uganda's economy.

She was interviewed by staff at the bank's Kyoga branch in Rakai district, about 110 miles south of Kampala, and its agricultural officer visited her plot. The officer has since supervised the work as part of the effort to monitor loan use.

Mrs Nabule has 18 months to repay, in seasonal instalments at the end of each harvest. This is a struggle, because bunches of the green banana and matooke, a type of plantain which is a Ugandan staple, fetch only 300 shillings each in the local market.

More than US\$20m in foreign aid, including US\$18m from the African Development Bank. Dr Mwine is trying to convince potential donors of the merits of a scheme that directly benefits the poor and bypasses government ministries.

UK milk farms 'unshaken by EC curb'

By Bridget Bloom, Agriculture Correspondent

THE European Community's imposition of milk quotas in 1984 had not shaken up the structure of milk production in England and Wales, a report by Britain's Ministry of Agriculture said.

The report notes that in general farmers sustained incomes through efficiencies, including switching from feeding concentrates to more effective use of grassland. Spending on concentrates in real terms in 1986-77 was little more than half that in 1976-77.

Milk yields per cow fell after introduction of quotas but by 1986-77 had recovered to pre-quota levels of about 5,200 litres a year per cow.

LONDON MARKETS

Table of London market prices for various commodities including Sterling, Gold, and various metals.

COCAOA

Table of Cocoa prices for various grades and origins.

COFFEE

Table of Coffee prices for various grades and origins.

SUGAR

Table of Sugar prices for various grades and origins.

GRAINS

Table of Grain prices for various types and origins.

POTATOES

Table of Potato prices for various grades and origins.

LONDON METAL EXCHANGE

Table of London Metal Exchange prices for various metals.

SOYABEAN MEAL

Table of Soyabean Meal prices for various grades and origins.

SOYABEAN OIL

Table of Soyabean Oil prices for various grades and origins.

SOYABEAN MEAL MARKET

Table of Soyabean Meal Market prices for various grades and origins.

SOYABEAN OIL MARKET

Table of Soyabean Oil Market prices for various grades and origins.

WORLD COMMODITIES PRICES

Table of World Commodity Prices for various commodities across different regions.

US MARKETS

Continuing moderate temperatures coupled with expectations of tight rains led to further liquidation in the futures market.

NEW YORK

Table of New York market prices for various commodities.

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CHICAGO

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WORLD STOCK MARKETS

Table of world stock markets including Australia, France, Germany, Italy, Japan, Netherlands, and Sweden. Columns include stock names, prices, and changes.

CANADA

Table of Canadian stock markets including Toronto and Montreal. Columns include stock names, prices, and changes.

OVER-THE-COUNTER

Table of over-the-counter stock prices with columns for stock names, prices, and changes.

Table of Japanese stock markets including various indices and individual stock prices.

Table of stock indices including Dow Jones, Nikkei, and various regional indices.

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NEW YORK STOCK EXCHANGE COMPOSITE PRICES

3pm prices August 22

Main table of stock prices with columns for stock symbols, prices, and changes. Includes sub-sections for '12 Month High Low' and 'Open Close'.



NYSE COMPOSITE PRICES

Main table of NYSE Composite Prices, listing various stocks with columns for High, Low, and Change.

AMEX COMPOSITE PRICES

Table of AMEX Composite Prices, listing various stocks with columns for High, Low, and Change.

OVER-THE-COUNTER

Table of Over-the-Counter market prices, listing various stocks with columns for High, Low, and Change.

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Advertisement for Brussels (02) 513 2816, featuring the text 'Have your F.T. hand delivered' and 'at the start of every working day at no extra charge in Belgium'.

